KARL H. POTTER
SIBAJIBAN BHATTACHARYA

The Encyclopedia of Indian Philosophies, Volume 6

Indian Philosophical Analysis



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ENCYCLOPEDIA OF INDIAN PHILOSOPHIES

VOLUME VI

Indian Philosophical Analysis
Nyāya-Vaiśeṣika from Gaṅgeśa to
Raghunātha Śiromaṇi

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PRINCETON UNIVERSITY PRESS
Princeton, New Jersey

Published by Princeton University Press, 41 William Street,
Princeton, New Jersey 08540
In the United Kingdom: Princeton University Press, Oxford

Library of Congress Cataloging-in-Publication Data

Indian philosophical Analysis: Nyāya-Vaiśeṣika from Gaṅgeśa to Raghunātha Śiromaṇi / edited by Karl H. Potter and Sibajiban Bhattacharyya.
p. cm.—(Encyclopedia of Indian Philosophies; v. 6)
Includes Index.

ISBN : 0-691-07384-8

I. Pooter, Karl H. II. Bhattacharyya, Sibajiban.
III. Series: Encyclopedia of Indian Philosophies (Princeton, N.J.) vol. 6.

B131.E5 1977 vol. 6 181'.4' 03 s—dc20 [181'.43'03] 90-22379

This book has been composed in India by Jainendra Prakash Jain
at Shri Jainendra Press, New Delhi

Printed in India.

10 9 8 7 6 5 4 3 2 1

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PREFACE

Volume Six of the *Encyclopedia of Indian Philosophies* picks up the history of the Nyāya-Vaiśeṣika system where Volume Two left off. The time covered in this volume is much smaller than in any of the previous volumes of the *Encyclopedia*, a scant two hundred years between approximately 1310 and 1510. There are good reasons for this intensive attention to such a brief period. For one thing, two of Indian's most remarkable philosophers, Gaṅgeśa and Raghunātha Śiromaṇi, are covered in these pages—in fact, they initiate and terminate the period surveyed. More generally, we here begin to treat the literature of Navyanyāya, a movement comparable in its implication to the burgeoning of symbolic logic and its concomitant philosophical speculations found in the writings of Frege, Russell and Wittgenstein in the West at the end of the 19th and beginning of the 20th centuries. The excitement of newly pioneered techniques of philosophical analysis developed by Gaṅgésa spawned a bevy of philosophical talents. Indeed, this period is even richer than we are able to summarize here, since a good part of it is still unavailable in print.

The history of Indian philosophy, and specifically of Navyanyāya, has been treated in a quite extensive literature. The *Bibliography of Indian Philosophies* (New Delhi : Motilal Banarsidass, 1970, referred to below as "B"; Revised Edition, New Delhi: Banarsidass and Princeton, Princeton University Press 1983, referred to as "RB") provides assistance in suggesting a chronology of Indian thought in general within which Navyanyāya philosophers find their appropriate places.

The form of this book features an extended introductory section followed by summaries of works belonging to the system's literature. These summaries are arranged in relative chronological order to assist the reader in tracing the development of the school's thought. Summaries have been provided by scholars from India, England and the United States. Remarks in the Introductions to previous volumes of the *Encyclopedia* explaining the intended reading public to whom these volumes are addressed apply here as well.

Thanks are due to the American Institute of Indian Studies, the Indo-U.S. Subcomission for Education and Culture, the Bureau of Educational and Cultural Affairs of the U.S. Department of State, the Joint Committee on South Asia of the American Council of Learned Societies and the Social Science Research Council, and the National Endowment for the Humanities; all of these bodies provided needed assistance in the development of this volume through financial assistance of various sorts. Finally, special thanks are due to Laura Townsend for assistance in preparation of the manuscript.

June 1989 KARL H. POTTER

PART ONE

INTRODUCTION TO THE PHILOSOPHY OF NAVYA-NYĀYA

1

HISTORICAL RÉSUMÉ

This, the second volume on the Nyāya-Vaiśeṣika system, takes up where Volume II of the Encyclopedia of Indian Philosophies left off, in the early fourteenth century with the pivotal figure of Gaṅgeśa, author of *Tattvacintāmaṇi.* It covers what we know of the history of the school up to and including Raghunātha Śiromaṇi, who flourished (we estimate) about 1510. In the two centuries covered there are some 50 authors whose names have come down to us as identifiable as having lived in this period, who are held to be responsible for some 98 works expounding or defending the principles of Nyāya-Vaiśeṣika. Of these 98 works, 15 have been lost and are known to us only by name, sometimes not even that. Of the remaining 83 works, 45 have been published, at least in part, and the remainder are known to exist (again, at least in part) in one or more manuscripts. Only six of the works from this period have been translated, even in part. A complete list of authors and works treated in the following material is provided in Table I, below on pages 10–13.

1. Major Figures

Gaṅgeśa is viewed, and rightly, as the founder of Navyanyāya, the "new" Nyāya system. The term "Navyanyāya" is used in two senses. On the one hand, it is frequently employed to identify Nyāya-Vaiśeṣika literature that appeared from Gaṅgeśa's time onwards, but a more precise sense of the term applies to that literature which, as Gaṅgeśa's work does, utilizes a certain technical vocabulary to explicate Nyāya concepts. In this latter sense, not all of the 50 authors treated here are Navyanaiyāyikas, since some of their works are commentaries on old Nyāya-Vaiśeṣika works in traditional style and with little or no use of the technical terminology and methods in question. However, the bulk of the literature here

surveyed is Navyanyāya in both senses of that term.

Navyanyāya flourished in the main in these first few centuries of its development in Mithila, that is, the northern part of what is now the Indian state of Bihar. The roster of authors in Table I (pp.10–13) represents in some measure a genealogy of scholarly families of Mithila. Gaṅgeśa was a Maithila. Many of these authors are in various relationships to the family whose earliest member listed here was Vaṭeśvara (1340). And practically all of them were related to each other either by family or by the relationship which binds teacher and pupil and pupil's pupil. While there have been suggestions that Navyanyāya also found its way into Bengal during this period, this has not been altogether substantiated. It was largely a Maithila monopoly until the time of Raghunātha, where this Volume ends. Subsequent Volumes will trace the process in which Navyanyāya gradually spread outwards from Mithila until exponents of it are found throughout the subcontinent.

Gaṅgeśa and Raghunātha are clearly the best known of these philosophers now, but a few others were equally important during the period treated. In particular, as soon as the *Tattvacintāmaṇi* had appeared commentaries on it began to be composed, and a lively controversy developed among the commentarial traditions. Notable is the debate between Narahari Viśārada and Jayadeva Miśra, both students and relatives of Yajñapati Upādhyāya (1460).

Jayadeva, otherwise known as Pakṣadhara Miśra (fl. 1470), is in many ways the central figure of the period. Navyanyāya was a family specialty inherited from Vaṭeśvara's time over a century before him. Jayadeva wrote a seminal commentary on the *Tattvacintāmaṇi* called *Āloka* and taught just about all the great figures of the next generation of the school, including Vāsudeva Sārvabhauma, Rucidatta Miśra, Raghunātha Śiromaṇi and others.

Vāsudeva Sārvabhauma was himself a great teacher, with many illustrious pupils, the most famous of whom was Caitanya, the great Vaiṣṇava saint and the leader of the Acintyabhedābheda school of Bengali Vaiṣṇavism. It was Vāsudeva who was (though this is disputed) mainly responsible for the development of Navyanyāya into a Bengali tradition. Vāsudeva founded a *ṭol*, a traditional place for study, at Navadvīpa (in the present-day Nadia district). In his later years he is said to have become first an Advaitin and then, eventually, a follower of Caitanya's. In addition to Caitanya and Raghunātha Śiromaṇi, Vāsudeva also is held to have taught Raghunandana, the jurist, whose commentary on Jīmūtavāhana's *Dāyabhāga* "is now held to be the best current authority on the Bengal school of Hindu law", [1] as well as Kṛṣṇānanda, the Tantrist, a well-known writer "on charms and other kindred subjects".[2]

Raghunātha Śiromaṇi is one of the most original thinkers in all of Indian philosophy, and is referred to regularly as the leader of the "Navyas", i.e., the "new" wing of Navyanyāya. Since Navyanyāya is "new" already the reference indicates the radical nature of Raghunātha's contributions, at least in the eyes of his fellow Naiyāyikas. His originality is matched by his reputation for irreverence and hubris, as recorded in various stories which have come down to us concerning him as a disrespectful pupil and brilliant but proud master. [3]

The line from Gaṅgeśa through Jayadeva and Vāsudeva to Raghunātha may be viewed as the major stream of development of the technical side of Navyanyāya, meaning by this the extensive use of methods which will be explained below together with a penchant for treating certain problems—notably the definitions of key notions in the theory of inference such as pervasion (*vyāpti*)—to a far more generous extent than many of the more traditional Nyāya concepts. These more traditional notions were also treated extensively in the literature of our period, notably by Vardhamāna (1350), Śaṃkara Miśra (1430) and Vācaspati Miśra II (1450) in their commentaries on some of the old Nyāya works. These writers, along with a number of others, are willing to accept the concepts of old Nyāya pretty much as they were taught by Udayana, say. Raghunātha is possibly the first and foremost commentator who undertakes to drastically revise Nyāya tradition, though some of his most extreme apparent innovations develop suggestions now known to have been pioneered by Bhāsarvajña the Bhūṣaṇakāra.[4]

It should be noted that critical historical scholarship on the philosophy of this period is still in its infancy. Picking out the half dozen or so figures named in the foregoing paragraphs may merely reflect accidental circumstances combining traditions of uncertain origin with the rather chance nature of which texts and names happen to have been preserved and which not. It may well be that others among the 50 authors here treated should be held to be as important as these are. For example, Gopikamohan Bhattacharya has studied some of the material found in manuscripts of lesser known figures such as the commentaries on the *Tattvacintāmaṇi* by Yajñapati and his son Narahari Viśārada, as well as by Rucidatta Miśra, another pupil of Jayadeva's. The contribution of Pragalbha (1460) is little known at this point, for his commentary is not studied.

2. The Literature of Early Navyanyāya

It will be seen that Table I below on pages 10ff. features numerous commentaries on such standard old Nyāya works as those of

Udayana, Keśava Miśra's *Tarkabhāṣā*, Śivāditya's *Saptapadārthī*, and Vallabha's *Nyāyalīlāvatī*. Only occasionally do writers of this period essay commentaries on the *Nyāya* or *Vaiśeṣika-sūtras* themselves, though Śaṃkara Miśra's *Upaskāra* on the *Vaiśeṣika-sūtras* is a highly authoritative reading within the school, if only by default, there being no extant commentary of any consequence prior to it. Several writers reply to the Advaita critique of Śrīharṣa's *Khaṇḍanakhaṇḍakhādya*. However, throughout this period, the work most commented on is the *Tattvacintāmaṇi*. It is, at least until Raghunātha, practically the only entirely independent Nyāya work composed in these centuries, at least among those that are extant and have been studied to any extent. It is arguable that Raghunātha's *Padārthatattvanirūpaṇa* should be viewed as an independent work on the Vaiśeṣika categories, though as mentioned it owes some of its inspiration to the Bhūṣaṇakāra.

It is, then, the *Tattvacintāmaṇi* that is the centerpiece of the period, and indeed of Navyanyāya through the centuries, although later on, to the present day, the commentators—Raghunātha, Jagadīśa, and Gadādhara especially—come to be studied more carefully than Gaṅgeśa's original. Two features of the *Tattvacintāmaṇi* are immediately noteworthy, before we turn to the innovations in the thought itself. These are Gaṅgeśa's style of exposition and the organization of his treatise.

Gaṅgeśa's method of exposition features the provision of a series of definitions of a topic. These definitions are in many cases clearly identified as the product of some rival theory, though in most cases the school responsible, much less the name of any particular author, is not mentioned, and in many of those cases it is definitions composed by rival Naiyāyikas that are criticized. Characteristically, a section of Gaṅgeśa's work will open with the quotation—or at least, a summary presentation—of one or more alternative definitions of the topic of that section, each definition being carefully expounded first and then as carefully criticized and emended, then criticized again until either one runs out of possible versions or the result of the emendations coincides with the correct account. The opponent's section is then followed by a section in which Gaṅgeśa proposes his own definition (or sometimes, several), which is once again considered with respect to possible criticisms and carefully defended.

This task of considering countless definitions calls for a technical terminology and methodological apparatus, and that is what Gaṅgeśa pioneers, although elements of his contributions can doubtless be discovered in his predecessors, especially Udayana. In the main, the technical terminology involves the manipulation of what may

be called "relational abstracts" in order to indicate clearly what aspect of a topic one is speaking about. To take a simple instance, if one is speaking of the fire on the mountain in the context of the stock inference (about there being fire on the mountain because smoke is known to be there) and one wants to clarify that it is the general features of fire that one is speaking of and not the features of this particular fire, one may say that it is this fire as characterized (*nirūpita*) by fireness that he has in mind. Again, if one is calling attention to the role of this fire in the inference in question he may speak of the *sādhya*-ness resident in this fire, thereby indicating that it is this fire as the topic of this inference and not as, say, a locus of fireness or any other role this fire might be playing in the world that he has in mind. For example, this fire is the counterpositive of an absence of this fire; Navyanyāya will speak of that role of this fire by referring to it as the locus of the counterpositiveness to absence of this fire. This same fire is also the qualificand in the expression "(this) fire is on the mountain", and so has qualificandness resident in it. And so on through the myriad roles—i.e., types of relations to other things—which it might on reasonably frequent occasions become relevant to speak of.

Navyanyāya manages to achieve the results of quantification through its manipulation of relational abstracts. Ingalls provides a graphic account of how Navyanyāya renders such an intricately quantified expression as "no body of smoke occurs in any locus in which no body of fire is present". The result he translates from Sanskrit as "in smoke there is a generic absence of occurrentness described by locus of absence of fire, which absence describes a counterpositiveness limited by fireness and contact". He provides simpler illustrations of the same point. We have quoted this example to point up one practical outcome of Navyanyāya techniques for English readers, which is to make understanding a literal translation of Navyanyāya into English well-nigh impossible. Such translations can, to be sure, be produced, but one has to practice reading them systematically so that they may be in turn translated again into some more familiar mode—whether ordinary colloquial English or, say, a mathematical-logic-oriented reconstruction. The point is of direct relevance to the task essayed in this volume on Navyanyāya, for this feature of Navyanyāya forces us to choose between intelligibility and faithfulness to the style of the original. The practice that has been followed in our summaries is to provide some of each, but that is itself somewhat misleading viewed in a certain perspective, for the reader must still consult the original Sanskrit to discover whether a passage summarized in colloquial English is or is not written in the technical idiom.

The second point of innovation concerns the organization of the *Tattvacintāmaṇi*. Overall, it is divided into four Books, one for each of the four instruments of knowledge recognized by Nyāya. This method of division is not unusual; as early as Jayanta Bhaṭṭa's *Nyāyamañjarī* we find portions of works thus organized, and the *Nyāyasāra* is divided into three parts corresponding to the three instruments that its author admitted. However, these works in at least a general way follow the order of the *Nyāyasūtras* in introducing the topics treated, and the general assumption is that the reader is understanding the work in the light of the *sūtra* literature. On the other hand, a work such as Vallabha's *Nyāyalīlāvatī* demonstrates more independence in organization, but its orientation is toward the categories of Vaiśeṣika as the basis for the plan of the work, and anyway there is little rationale for the order of topics. Gaṅgeśa's method is independent like Vallabha's but follows a plan which is traditional and understandable, and that plan stems from the epistemological categories rather than metaphysical ones.

The sections within this plan are especially interesting. Gaṅgeśa makes no attempt to justify his choice of topics treated. They are apparently those topics which have occasioned controversy, whether within or without the system. He is not primarily concerned to react to critiques stemming from quite foreign standpoints, such as Buddhism or Advaita Vedānta. He largely deals with *pūrvapakṣas* which appear to represent either other Naiyāyikas or else one or another of the three main schools of Pūrvamīmāṃsā—the Prabhākaras, the Bhaṭṭas and the Miśras. The result resembles nothing so much as a series of philosophical journal articles on knotty puzzles of analysis. Combined with Nyāya technical apparatus and terminology the upshot is a formidably difficult work which is unquestionably deep and worthy of careful study. It is no wonder that it occasions a new beginning in the ever-continuing work of Nyāya commentators. It is likewise not surprising that the commentaries on the *Tattvacintāmaṇi* outdo the text in difficulty, some would say obscurity. One has the strong impression that these commentaries spring from earnest and searching discussions among a small group of initiates into a cult whose common bond is a special terminology. References by these commentators are largely to each other, but again without identification, suggesting that they were written for each other in a context where everyone knew—or ought to have known—whose view is alluded to and what is going on at each point in the exercise. The commentaries do not slavishly comment on quoted passages from Gaṅgeśa either. Especially in the *Dīdhiti* of Raghunātha Śiromaṇi we find whole contexts laconically identified in a single word or phrase, and not always favorably:

Raghunātha was quite willing to reject Gaṅgeśa's opinions in favor of others, whether his own or those already proposed. The vast subcommentaries of Jagadīśa, Mathurānātha and Gadādhara are critical to the very life of this tradition, because it is dubious that these obscure references by Raghunātha could have been made intelligible outside of such authoritative renderings.

Raghunātha, furthermore, submits whole new sections of his own which break new ground. Notable among these is the section on the notion of the "limitor" (*avacchedaka*), frequently cited in modern times as at once the most crucial and the most difficult of the Navyanyāya technical notions. It is not that the term "limitor" had not occurred previously in Nyāya writings, indeed even before Gaṅgeśa. However, Gaṅgeśa does not devote a separate section to it. Raghunātha does. On the other hand, Raghunātha does not comment on every one of Gaṅgeśa's sections. The two concluding sections of Book Two of the *Tattvacintāmaṇi*, those on causal efficacy (*śakti*) and on liberation (*mukti*), are ignored by Raghunātha, and the section before those, on the inference justifying God's existence, is only summarily treated in the *Dīdhiti* in a few sentences. It seems unlikely that these comments have been lost, although that is of course possible, as it is also likely that his comments on the third and fourth Books—on comparison (*upamāna*) and verbal testimony (*śabda*) respectively—once existed but have been lost for the time being at least.

TABLE 1

Nyāya-Vaiśeṣika from Gaṅgeśa to Raghunātha Śiromaṇi: Checklist of Authors and Works

T—Translated
E—Not translated, but has been published
M—Not published, but manuscript(s) available
C—Commentary

	Name	*Date*	*Place*	*Works*
1.	Gaṅgeśa	1320	Darbhanga	*Tattvacintāmaṇi* (E; Part T)
2.	Vaṭeśvara	1340	Mithila	*Nyāyanibandhadarpaṇa* *Nyāyalīlāvatīdarpaṇa*
3.	Vardhamāna	1345	Mithila	*Dravyakiraṇāvalīprakāśa* (E) *Guṇakiraṇāvalīprakāśa* (E) *Nyāyalīlāvatīprakāśa* (E) *(Pariśuddhi) Nyāyanibandha-prakāśa* (Part E) *Nyāyakusumāñjaliprakāśa* (E) *Nyāyapariśiṣṭaprakāśa* (E) *Khaṇḍanakhaṇḍakhādyaprakāśa* (M) *Nyāyasūtrānvīkṣānayatattva-bodhinī* (M) Commentary on *Ātmatattvaviveka* (M) Commentary on *Tarkabhāṣā* (M)
4.	Rājaśekhara	1350	?	*Nyāyakandalīprakāśa*
5.	Jayasiṃhasūri	1366	?	*Nyāyasāratātparyadīpikā* (E)
6.	Cinnam Bhaṭṭa	1390	Andhra	*Tarkabhāṣāprakāśikā* (E) *Tārkikarakṣāsaṃgrahavivaraṇa* (M)
7.	Tvanto-pādhyāya	1400	Mithila	Commentary on *Tattvacintāmaṇi* *Nyāyakusumāñjalimakaranda*
8.	Ghaṭeśa Upādhyāya	1400	?	C on *Tattvacintāmaṇi*?
9.	Nyāyaloca-nakāra	1400		*Nyāyalocana*
10.	Gaṅgāditya	1400	?	C on *Tattvacintāmaṇi*
11.	Jīvanātha Miśra	1400	Mithila	
12.	Bhavanātha Miśra	1400	Mithila	C on *Nyāyakusumāñjali*
13.	Jinavardhana	1412	?	*Saptapadārthījinavardhanī* (E)

	Sūri			
14.	Śivapati	1420	?	
15.	Viṣṇubhaṭṭa	1420	?	*Tarkabhāṣāprakāśikāniruktivivṛti*
16.	Rāmeśvara	1420	?	Completion of Cinnambhaṭṭa's *Tārkikarakṣāsaṃgrahavivaraṇa* (E)
17.	Nārāyaṇācārya	1420	South?	*Ātmatattvavivekadīpikā* (E)
18.	Śeṣa Śārṅgadhara	1420		*Lakṣaṇāvalīnyāyamuktāvalī* (E) C on *Kiraṇāvalīprakāśa* (M?) *Tarkacandrikā* (M)
19.	Vāsudeva Sūri	1420	Kashmir	*Nyāyasārapadapañcikā* (E)
20.	Guṇaratna Sūri	1420	?	*Nyāyasiddhāntadīpaṭippaṇī* (E)
21.	Śaṃkara Miśra	1430	Darbhanga	*Nyāyakusumāñjalyāmoda* (E) *Bhedaratna* (E) *Vādivinoda* (E) *Kaṇādarahasya* (E) *Vaiśeṣikasūtropaskāra* (ET) *Ātmatattvavivekakalpalatā* (E) *Nyāyalīlāvatīkaṇṭhābharaṇa* (E) *Tattvacintāmaṇimayūkha* (E)
22.	Hari Miśra	1430	Mithila	
23.	Vācaspati Miśra II	1440	Mithila	*Khaṇḍanoddhāra* (E) *Nyāyatattvāloka* (M?) *Nyāyasūtroddhāra* (E?) *Nyāyaratnaprakāśa* (M) *Pratyakṣanirṇaya* *Anumānanirṇaya* (Part M) *Śabdanirṇaya* *(Tattva) Cintāmaṇiprakāśa* (Part M)
24.	Mallinātha	1445	?	*Tārkikarakṣāsārasaṃgrahaniṣkāntikā* (Part E)
25.	Pakṣadhara	1450	?	*Tattvacintāmaṇiviveka* *Dravyakiraṇāvalīprakāśaviveka* (M) *Kiraṇāvalīprakāśadravyaviveka* (M) *Nyāyalīlāvatīviveka* (M) *Nyāyalīlāvatīprakāśaviveka* (M)
26.	Bhuvanasundarasūri	1450	?	*Mahāvidyāviḍambanāvyākhyānadīpikā* (E) *Laghumahāvidyāviḍambanā* (E) *Mahāvidyāślokavivaraṇaṭippaṇa* (E)
27.	Śeṣānanta	1450	?	*Saptapadārthīpadārthacandrikā*

				(E) *Nyāyasiddhāntadīpaprabhā* (E)
28.	Narahari	1455	Navadvipa	
29.	Yajñapati Upādhyāya	1460	Mithila	*Tattvacintāmaṇiprabhā* (E)
30.	Pragalbha Miśra	1470	Mithila?	*Tattvacintāmaṇiprāgalbhī* (Part E) *Nyāyalīlāvatīviveka* (M) *Khaṇḍanadarpaṇa* (Part E) C on *Kiraṇāvalīprakāśa* (M)
31.	Jayadeva or Pakṣadhara Miśra	1470	Mithila	*Tattvacintāmaṇyāloka* (Part E) *Pramāṇapallava* (M) *Nyāyapadārthamālā* (M) *Śaśadharavyākhyā* on *Nyāyasiddhāntadīpa* (M)
32.	Śrīnātha Bhaṭṭācārya Cakravartin	1470	Varanasi	Commentary on *Tattvacintāmaṇi*
33.	Vāsudeva Sārvabhauma	1480	Navadvipa	*Tattvacintāmaṇisārāvalī* (M)
34.	Kṛṣṇānanda Vidyāvinoda	1485	Navadvīpa	*Tattvacintāmaṇi(pratyakṣa) kṛṣṇa*
35.	Janārdana	1490	Mithila	*Tattvacintāmaṇiprakāśa* (M)
36.	Timmabhūpāla	1490	?	
37.	Misaru Miśra	1490	?	*Padārthacandra* (M)
38.	Virūpākṣa Miśra	1490	?	Commentary on *Tarkabhāṣā* (Part M)
39.	Narahari Upādhyāya	1495	Mithila	*Tattvacintāmaṇidūṣaṇoddhāra* (M) Commentary on *Ātmatattvaviveka* (M)
40.	Mādhava Miśra	1500	Mithila	Commentary on *Tattvacintāmaṇi*
41.	Śrīkāra Kubjaśaktivāda	1500	?	
42.	Śūlapāṇi	1500	?	
43.	Vāsudeva Miśra	1505	Mithila	*Nyāyasiddhāntasāra* (M)
44.	Rucidatta Miśra	1505	Mithila	*Tattvacintāmaṇiprakāśa* (Part E) *Nyāyakusumāñjalimakaranda* (E) C on *Tarkabhāṣāprakāśa* (M) *Nyāyalīlāvatīvibhāṣā* (M) *Kiraṇāvalīprakaśavivṛti* (E)
45.	Ratnākara Vidyāvācaspati	1505	Navadvipa	Commentary on *Tattvacintāmaṇi* and *Āloka* (M)

46. Puruṣottama	1510		
47. Janeśvara Vāhinīpati	1510	Navadvipa	*Tattvacintāmaṇyālokoddyota* (M)
48. Bhairavendra	1510	?	*Saptapadārthīśiśubodhinī* (Part E)
49. Gadādhara Miśra	1510	?	*Nyāyabhūṣaṇaprakāśa* (M)
50. Raghunātha Śiromaṇi	1510	?	*Ātmatattvavivekadīdhiti* (E) *Nyāyakusumāñjalidīdhiti* (M) *Nyāyalīlāvatīprakāśadīdhiti* (M) *Kiraṇāvalīprakāśadīdhiti* (E) *Padārthatattvanirūpaṇa* (ET) *Nyāyalīlāvatīvibhūti* (M) *Ākhyātavāda* (ET) *Nañvāda* (ET) *Tattvacintāmaṇidīdhiti* (E, Part T)

2

RELATIONS AND ANALYSIS OF AWARENESS

Perhaps the most dramatic development from the time of elder Nyāya-Vaiśeṣika to our period of Navyanyāya concerns the treatment of relations. The tendency in old Nyāya was to conceive of relations as entities belonging to one or another of the Vaiśeṣika categories. Thus inherence (*samavāya*) is counted as one of the seven fundamental categories (*padārtha*) of classical Vaiśeṣika, while contact (*saṃyoga*) and disjunction (*vibhāga*) are viewed as types of the second category, of qualities (*guṇa*). As time goes by there is a growing realization that each and every individual falling into one of the categories sustains relations with other individuals, and the conception arises that any individual may relate *itself* to another thing. These self-linking connectors are known as *svarūpasambandhas*, and in Navyanyāya their varieties become virtually innumerable.

All relations are regarded in Navyanyāya as dyadic relations between two terms, the first called *anuyogin* or referend, the second the *pratiyogin* or referent. The Navyanyāya theory is that a relation is always a property resident in the referend, so that a natural way to analyze any relation is as follows: where *a* is the referend, *b* the referent, and R the relation, we can say "a- (R-b)". Thus, e.g., where Daśaratha is Rāma's father, we shall have "Daśaratha- (father of-Rāma)". This situation can be expressed most accurately and technically in Navyanyāya by saying that the father-of-ness resident in Daśaratha is determined by the son-of-ness resident in Rāma. This accurate but awkward expression becomes standard later on in Navyanyāya; an earlier and less awkward but more inaccurate manner of speaking was to say that the father-of-ness resident in Daśaratha is determined by Rāma.

Where R is inherence, contact or disjunction, "a-(R-b)" is to be read as indicating a triadic situation involving three distinct

entities. Where R is a self-linking connector, there are only two entities involved, although the situation is still triadic in form. For example, take a self-linking connector recognized in old Nyāya, viz., the relation between the place where something is absent and the absence. This relation is called "absential qualification" (*abhāvīya-viśeṣaṇatā*), and can be symbolized as "ground-(R-absence of pot)". Here R does not designate a third thing beyond its relata; the ground is functioning as its own relation.

An absential qualification relation can only relate a positive entity with an absence. Inherence only relates certain sorts of entities to certain other sorts; likewise, contact. Thus relations can be classified according to the kinds of relata they connect. This is true of self-linking connectors. The relation *being the father of*, which we saw connecting Daśaratha with Rāma, is a self-linking connector, ontologically identical with Daśaratha. Clearly, there are indefinitely many such relations which could be appealed to in analyzing a complex situation.

Some self-linking connectors are especially useful because of their abstract nature. For example, being a *qualifier* (*viśeṣaṇa*) is something by which a great many entities are capable of being in relation to appropriate qualificands (*viśeṣya*). Thus the self-linking connector being the qualifier of, or qualifierness (*viśeṣaṇatā*), is a type of relation tokens of which are rife in the world. Likewise for qualificandness (*viśeṣyatā*). For example, whenever a universal property—say, cowness—is present in a cow, the cow is related by qualificandness to the cowness, and the cowness is related by qualifierness to the cow. Qualifierness and qualificandness have varieties, of course: we can distinguish temporal qualification (*kālikaviśeṣaṇatā*, spatial qualification (*daiśikaviśeṣaṇatā*), absential qualification (as we saw), etc. Other abstract relations of this type include the following: the relation called *anuyogitā* (in *x*) of being the referend (to *y*) and the relation of *pratiyogitā* (in *y*) of being the referent (to *x*); the relation of *pratiyogitā* (in *x*) of being the counterpositive (to some absence *y*); the relation of *viṣayitā* (in some awareness *x*) of having some *y* as its content, and the relation called *viṣayatā* in *y* to its locus, the awareness *x*; the relation called *pratibandhakatā* in *x* of obstructing the occurrence of something *y*, and its converse, the *pratibandhitatva* to *x* resident in *y*; the relation (called *ādheyatva*) of being resident in *y* which is found in *x*, and its converse *ādhāratva* or *adhikaraṇatā* which belongs to *y* relative to *x*; the relation called *kāraṇatā* which resides in *x* which is the cause of *y*, and its converse *kāryatā* which resides in *y* with respect to *x* in the same circumstance.

Some relations are direct, such as those just listed. Others are indirect, such as the ones identified by Uddyotakara[5] called "being inherent in what inheres", "being inherent in what is in contact", etc. Another indirect relation is that of *sāmānādhikaraṇya*, *having the same locus as*: *x* has the same locus as *y* if both are resident in some *z*.

An especially difficult and important relation is that of limitorness (*avacchedakatva*) and its converse limitedness (*avacchedyatva*). Though the term *avacchedaka* appears in early Nyāya literature, it is Raghunātha Śiromaṇi who makes of it an especially important tool of analysis.

Some relations are such that one of their relata occurs in or on the other. E.g., all cases of inherence are such—qualities and motions occur in the substances they qualify, wholes occur in their parts, etc. On the other hand, sometimes contact involves such occurrence, sometimes not. A classification used in Navyanyāya is that between "occurrence-exacting" (*vṛttiniyamaka*) relations and those which are not occurrence-exacting (*vṛttyaniyamaka*). Inherence, self-linking connectors and temporal relations are always occurrence-exacting. Among nonoccurrence-exacting relations we may class pervasion, identity, and most indirect relations.

Another classification among relations concerns whether the referend occurs in all of the referent or not. The most important application of this distinction is to the relation of contact and its absence. If a monkey is in contact with a tree, it is not in contact with all the places occupied by the tree, since it is sitting, say, on one of its branches. Thus contact is said to be a relation of incomplete occurrence or non-locus-pervasion (*avyāpyavṛtti*). Analogously, the absence of monkey in the tree through contact is a non-locus-pervading relation as well.

A special relation, discussed by Raghunātha Śiromaṇi, is that between a number (say, duality) and the pairs that it qualifies. The number two, i.e., duality, inheres in the two substances making up a pair which is, as we say, twofold. But what shall we say about a pair of qualities, or a pair of motions? Since number is itself a quality, a member of the second Vaiśeṣika category, and since qualities can only inhere in substances, we cannot say that the number two inheres in the two qualities which make up the pair. The Navyanaiyāyikas solve this problem by saying that there is a special relation which connects the number two, not to the members of the pair, but to the pair itself. This relation, called *paryāpti*, is a self-linking connector, and so it can perfectly well link a quality to a pair of qualities. Properties that occur in pairs, triples, etc., are known as *vyāsajyavṛtti* properties.

Identity (*tādātmya*) and difference (*bheda*) are two non-occurrence-exacting relations, the converse of each other. X and Y are related by identity just if X is the same individual as Y, i.e., they have the same nature or essence. It should be noted that "identity" as used to designate this relation cannot be equated with identity as it is normally understood in Western logic. Specifically, the Navyanyāya identity is between individuals: to say X and Y are identical is to say they are the very same individual. This will be interesting when X, that is, Y is known under different descriptions. Thus I may know the entity in question as a blue pot, and you may know it as a pot. Or, I may know it at one time as a pot, and later as an umbrella-stand. The identity relation obtains between any individual and itself regardless of what description or descriptions that individual is known under. Absence of identity is what is called "mutual absence" or difference, again, the difference being between two distinct individuals regardless of the descriptions under which they may be known.

Viewed in historical perspective, there is a great deal of development between Gaṅgeśa and Raghunātha in their use of relations of these exotic sorts to say accurately things that could only be phrased ambiguously in ordinary Sanskrit. Just how much of Raghunātha's apparatus was his invention, and how much he got from his teachers and the tradition they inherit, is impossible to say until closer study has been made of the figures which intervened between the two great Naiyāyikas.

The most intricate use of these relations occurs in connection with the analysis of awareness, to which we shall now turn. It is this side of Navyanyāya which is developed to an astounding degree in the further commentarial literature on *Dīdhiti* contributed by Jagadīśa and Gadādhara. That literature will be surveyed in another volume of this series.

3

METAPHYSICS

Navyanyāya developed a language to describe knowledge and other allied cognitive states and attitudes. This language, which is different from ordinary Sanskrit, is technical in the sense that it contains terms for concepts which were developed to deal specifically with cognitive mental states. This is why, even though the metaphysics of Navyanyāya is realistic, it could be taken out of the metaphysical system and made to apply *mutatis mutandis* not merely to other philosophical systems but to all serious discourse as well. A mastery of the techniques of this language came to be considered necessary not merely for students of philosophy but also for students of grammar, poetics, law and even medicine. All of these involve rigorous discussion of the nature of cognition. Navyanyāya is really a logic of cognition.

The Sanskrit term *jñāna* is used to denote not merely propositional acts like judging, believing, disbelieving, doubting, assuming, inferring, remembering, perceiving, but also nonpropositional states like sensing, feeling, etc. *Jñāna* is therefore identical with awareness (of facts, objects, sensory qualities, mental states, etc.). It will be translated as "awareness" henceforward.

Jñāna is always used in the episodic sense to denote an occurrence of an act, but never in the dispositional sense. The term *saṃskāra* is used for 'disposition' in general, physical as well as mental; in the context of cognition, *saṃskāra* is used to denote unconscious traces which when stirred up or activated produce conscious memory. We shall use "cognitive act" as an abbreviation for "actual conscious state of awareness", but not in the sense of any activity or action. Even sensing will be a cognitive act in this sense.

This concept of an awareness or cognitive act plays an important role in Navyanyāya logic. In this logic Navyanyāya makes use of a certain concept of a relation between two such cognitive acts which is novel and difficult to explain, viz., the preventer–prevented relation

between two such acts. One awareness, under certain conditions, prevents the occurrence of another awareness, although it does not prevent or cancel the existence of a mental disposition. So the relation holds only between acts of awareness, not between an act and a disposition, or between two dispositions.

An awareness has generally (except for enumerative cognition) three moments or phases: (a) a moment of origination, (b) a moment of duration in which an act produces its own trace, and (c) a moment of cessation. Navyanyāya holds that two awarenesses cannot originate at the same moment. An awareness originating at *t* will prevent every other act from originating at *t*. It is a psychological law that we cannot attend to more than one thing at a time.

Although two awarenesses cannot originate at the same time, still one awareness can, and if introspection is to be possible, must originate, i.e., be in its first phase, when a prior awareness endures, i.e., is in its second phase. The introspective act is just one jump behind the act which is its content. In the waking state there is no felt gap between two awarenesses. When the preceding awareness is in its second phase the succeeding awareness originates and replaces the former; and so on. In Navyanyāya terminology the succeeding awareness "destroys", "kills" the preceding awareness.

An act of awareness may produce a disposition; indeed, no dispositions can arise except as caused by some act. The disposition which is caused by an awareness is a memory trace which will produce a memory when it is stirred up or activated. This dispositional memory-trace will not be the direct cause of any other type of awareness except memory, and will not be the direct cause of any behavior, even of speech behavior.

There is a controversy among philosophers of the Navyanyāya school on the nature of the relation between a disposition and an act of awareness. The question is whether, after an activated disposition causes a memory, the diposition continues to exist. According to one section of Navyanyāya a disposition after producing the memory act will itself be destroyed. It will no longer remain that disposition, although the memory act it produces will leave behind it a new disposition which will be stronger than the old disposition and so not require much excitation to bring about another memory. The difficulty in this theory would seem to be that it has to postulate innumerable dispositions of almost the same cognitive form. This is what has led other philosophers of the school to hold that a disposition is not destroyed even after the production.

The preventer-prevented relation, mentioned above, is not only this feature of the psychological impossibility of more than one awareness' originating at one time. The preventer-prevented relation

holds between two awarenesses, not in virtue of their merely being awarenesses, but in virtue of their contents. Elucidation of the point helps to explain how there can be a *logic* of cognition given the episodic nature of cognitive awarenesses in Nyāya.

An interesting puzzle broached in Western philosophical analysis concerns whether it makes any sense to say 'A believes *p* and does not believe *p*'. According to Navyanyāya this puzzle can be solved easily by a distinction between an actual awareness belief and a disposition to believe. We have already seen that a second act can originate while a prior act endures. So, if we symbolize by *t* the time when the first act (of believing *p*) originates, and if we symbolize by *t′* the time when that act endures, then we can say that it is logically possible that X believes at *t* that *p* and X believes at *t′* that *q*. However, it is not logically possible, on Navyanyāya assumptions, that X believes at *t′* that *p* and X believes at *t′* that not-*p*, since, as long as X continues to consciously believe (i.e., be aware of believing) *p* X cannot even *start* believing that not-*p*. As long as the belief that *p* endures as a conscious state, the other act of believing that not-*p* cannot even originate. This impossibility has nothing to do with the psychological mechanism of the origination of acts, but is completely determined by the logical relation between *p* and not-*p*.

According to Navyanyāya the relation between a preceding and a succeeding act is that of the killed and the killer; the two acts have to meet, if only for one moment, so that the succeeding act can kill the preceding act. But in the case of awarenesses of two contradictory propositions, the presence of the one act prevents the origination of the other act, so that they can never be copresent, not even for one moment. This is because, under conditions specified below, the awareness of one proposition is a negative condition of the awareness of its contradictory; that is, the absence of one awareness is necessary for the occurrence of the other act. So the preventer act and the prevented act can never meet. If, however, the belief that *p* has lapsed into a mere disposition and is no longer a conscious state, if it is forgotten and not remembered at the moment, then the mere disposition will not prevent the same person from believing that not-*p*.

Thus we have come to a fundamental difference between disposition and act. So long as a conscious act of believing that *p* remains a conscious act, it will prevent a person from consciously believing that not-*p*; but if the belief is a mere disposition and is not recalled, then the same person can believe that *p* and also that not-*p*, and one of the beliefs can become also actualized at one time. A person can believe that not-*p* consciously only so long as she does not realize that she also believes that *p*; that is, a person cannot consciously, knowingly hold self-contradictory beliefs; but unknowingly, without

realizing that she does so, a person can hold beliefs (as unconscious dispositions) which may not be consistent.

Note that the preventer awareness must be attended with belief—it must not be a supposition or a doubt; it may be either true or false, but if false, it must not be cognized, truly or falsely, as false; it must be about the proposition which is contradictory to the proposition cognized by the prevented awareness. The prevented awareness can be either true or false; it may or may not be attended with belief; it must not be a supposition; it must not be an ordinary perception, or an illusory perception due to any psychophysical defect; and it must be propositional.

To explain. If we suppose that S is P, then this supposition when it endures as an actual conscious state cannot prevent us from cognizing or even knowing that S is not P. So even if we know that S is P, this knowledge will not be able to prevent us from supposing that S is not P. However, in this case the supposition will be contrary to fact. Then an illusory perception cannot be prevented from occurring by any awareness of the contradictory proposition. Thus, if we are suffering from jaundice, then even though we know actively that the wall is not yellow, yet we shall see that the wall is yellow; but in this case the illusory perception will not be attended with belief. Thirdly, the preventer awareness can be either true or false; it is not always the case that only a true awareness can prevent the occurrence of a false awareness, for even a false awareness held with firm conviction can prevent one from cognizing the truth. But if our awareness is false, we must not know or even suspect it to be false if it is to prevent the awareness of the truth. For if we know or doubt that our awareness is false, then we shall withhold our belief from it, and this awareness without belief will not be able to act as the preventer awareness. The awareness which is prevented may, however, be a doubt, this is, an awareness not attended with belief; it we cognize with belief that S is P, then we cannot even doubt that S in not P.

There are certain propositions such that the conditions which produce the awareness of the one proposition are exactly the same as those which produce the awareness of the other. In such a case the two propositions are the contents of one and the same awareness. For example, the logical converse of a proposition is cognized by the same awareness that has that proposition as its content. Thus not merely the awarenesses of *p* and of not-*p* have the relation of preventer to prevented, but any awareness which is produced by exactly the same conditions as the awareness of *p* will prevent or be prevented by the awareness of not-*p*.

According to Navyanyāya the conditions of different kinds of awareness have different strengths. In every moment of waking awareness sufficient conditions for the perception of something or the other are present. A problem, then, is this: how is it ever possible for us not to be constantly perceiving objects but to have inference, or to understand what others say to us? Suppose I am now sitting in a chair; sufficient conditions for perceiving all objects in front of me are present. How then can I infer, as I do now, that it is going to rain very soon? According to Navyanyāya this is possible only if the conditions of making this inference predominate over the conditions of perception. Now in determining the relative strength of the conditions of perception, inference, or of understanding the meanings of heard sentences, Navyanyāya refers to the contents of awareness. If the contents of the awarenesses are the same, then the conditions of perception prevail over conditions of inference, verbal testimony, etc. Thus verification is possible; what is perceived may be the same as what is inferred or known from others, so what we perceive can be justified by inference or corroborated by what others say. If, however, the contents are not the same, then the conditions of inference prevail over the conditions of perception. Thus if conditions for perceiving that it is raining are present, then even if conditions for inferring the same are present, we shall have perceptual awareness and not inference. But if conditions for perceiving a table (say, for becoming perceptually aware that the table is brown) and conditions for inferring that it is raining are present, then because the contents of perception and inference are different, we shall draw the inference. In every case the desire to cognize in a certain way rather then in any other way will produce the desired type of awareness; desire to cognize in a certain way has overriding influence on the mode of awareness.

We said that Navyanyāya philosophers developed a logic of cognition. In developing this logic Navyanyāya starts with a certain presupposition, viz., that there must be a definite way of understanding the nature of cognitive awarenesses. If we do not understand or are uncertain about the nature of awarenesses themselves, we cannot develop a logic of cognition at all. The logic of cognition is not developed in order to clarify confused awareness of cognition but to describe in a rigorous manner what we already understand. The method of understanding the nature of awarenesses is introspection. According to Navyanyāya, introspection gives us an infallible understanding of our mental states, of our awarenesses. The technique of referring constantly to awarenesses in order to decide between two alternative hypotheses is due to Raghunātha Śiromaṇi and has been used very widely ever since.

This explains why Navyanyāya does not give any criterion of what it is to be one awareness or cognitive act. If there is any controversy whether the alleged awareness is one or many, the method by which this controversy is resolved is by reference to introspection. Likewise, there is no criterion for deciding whether a supposed fact is a single fact or a complex of many facts. In Western philosophy, the problem of identity of propositions or of facts has posed a very difficult problem. Navyanyāya does not distinguish between a proposition and a fact, i.e., does not believe in the existence of any proposition distinct from fact.

Whether a fact is one or a complex of many atomic facts can be discussed from various points of view. For example, it may be held that there is one fact corresponding to a certain type of atomic proposition and also of all propositions formed from it truth-functionally by adding an even number of negatives. It is sometimes said that two propositions, if they are logically equivalent, are then identical, and that corresponding to them there is only one fact and not two. This is, according to Navyanyāya, to approach the problem from a point of view different from that of a logic of cognition, for even if two propositions are logically equivalent, the awareness of one need not be identical with the awareness of the other. For example, to cognize that *p* is not the same as to cognize that not-not-*p*, even though *p* and not-not-*p* are truth-functionally equivalent. The point here is that unless we make an assumption of rationality which amounts to limited omniscience we cannot say that a person who is aware of a certain proposition is bound to cognize or even ought to cognize all the propositions which are either logically equivalent to it or follow logically from it.

So far as our actual awarenesses are concerned one person may cognize what is logically equivalent to it or what is entailed by it. Navyanyāya distinguishes between contents of awareness from this standpoint of the logic of cognition, so that contents will be distinguished from each other even if they are expressed by propositions which are logically equivalent or by some propositions logically implying others. A content is what becomes evident to a person through his awareness of it; that is, a content is what a person actually cognizes it to be and not what he ought to cognize it to be.

According to Navyanyāya, awarenesses are of two types, nonpropositional (*nirvikalpaka*) and propositional (*savikalpaka*). Propositional awarenesses are awarenesses of a complex whole containing a relation and its two terms (according to Navyanyāya all relations are dyadic).

This may suggest that what is cognized in this type of awareness can be schematically represented as "aRb"; but this representation

is not sufficiently perspicuous. For, according to Navyanyāya, what is cognized in a propositional awareness becomes a term of another relation cognized in a more complex awareness. "aRb" represents a fact, but what is cognized in a propositional awareness cannot be said to be a fact; it is really a complex content. As has been said, we shall represent it by "a–(R–b)", which will stand for a complex term denoting *a*–as–related–to–*b*–by–R. The three elements of this complex term are designated by the technical expressions "qualificand" (*viśeṣya*), "qualifier" (*viśeṣaṇa*), and "qualification" (*vaiśiṣṭya*). In the content of the awareness represented by "a–(R–b)"

a (not "*a*") is the qualificand of the awareness,

b (not "*b*") is the qualifier of the awareness,

R (the cognized relation) is the qualification of the awareness,

a–(R–b) is *a*–as–qualified–by–*b* as the successor of the relation R, or *a*–as–related–to–*b*–by–R.

Propositional awareness is also called "qualified awareness" (*viśiṣṭajñāna*).

This representation of the content of an awareness, a–(R–b), is regarded as a complex term. But Navyanyāya makes no distinction between a sentence (which contains a finite verb) and a complex term. So, in speaking of propositions in the foregoing, the reader should understand these as structured as a–(R–b). So far as the nature of awareness is concerned, both a sentence and a complex term produce the same type of propositional or qualified awareness. Thus "(the) brown table" (in Sanskrit there are no articles, definite or indefinite), and "(the) table is brown" express the content of the same awareness; the "is" is redundant according to Navyanyāya, and in ordinary Sanskrit it is often omitted. (The grammarians, of course, insist that a sentence must contain a finite verb which, if not expressed, has to be understood. But Navyanyāya philosophers hold that a complex term is a sentence, or rather, in the context of cognition, that the content of an awareness expressed by a sentence is to be understood as a complex term with the structure a–(R–b).)

The relation R in this representation of the content of an awareness may be any relation. The qualificand is said to be cognized through the qualifier, which must have, therefore, already been cognized. To stop the infinite regress of qualifiers, Navyanyāya postulates nonrelational awareness, in which universals and other unanalyzable properties are directly cognized, that is, not cognized through any qualifier. Thus universals are self-evident in the sense that they are cognized in and through themselves and not through any qualifier.

By contrast with the nonpropositional kind of awareness, in a qualified or propositional awareness the awareness manifests something (the qualificand) *as* something else (the qualifier, also known

as the "chief qualifier" (*prakāra*)). Both the qualificand and the qualifier are factors in the content of the qualified awareness.

Now according to Navyanyāya, a qualificand as qualified is ontologically the same thing as the qualificand without the qualification. For example, a blue pot is ontologically the same as the pot, and by cognizing the pot as blue we are not cognizing anything different from the pot. But, although this particular pot which happens to be blue is identical with this particular pot ontologically, still the awarenesses of this as a blue pot and of this as a pot are different awarenesses. To explain this difference between the awarenesses Navyanyāya introduces the important concept of a limitor (*avacchedaka*). The limitor is the mode under which an ontological entity becomes evident in an awareness. Thus, if we cognize an entity simply as (a) pot, then the mode under which it is presented to the awareness is *potness*, for the entity is cognized as an instance of (that is, as related in a specific manner to) the universal *potness*. Although the content cognized is expressed by a single word, "pot", still the awareness is of a complex of the form a–(R–b), where *a* is the pot, R is inherence, and *b* is the universal *potness* which is cognized directly. Here *b* (the universal) is the limitor of the property of being the qualificand and resident in *a* (the pot). A limitor is thus a qualifier, but all qualifiers are not limitors; the difference is that qualifiers may be expressed in language by words denoting them, or else they have to be understood by themselves, even though what they are understood *as* is not expressed. Limitors are qualifiers of the latter type, i.e., when the content of an awareness is expressed in words the limitors have to remain unexpressed, yet in the awareness of the object they have to be cognized as qualifiers.

The result is that on the Navyanyāya view no linguistic expression can adequately represent all the factors in the content of a propositional awareness. This is because whenever a content is expressed by a word, that word fails to express the manner of presentation (the limitor). This manner of presentation therefore has to be understood. That is, in the awareness the mode of presentation will be manifest but there is no way of expressing it in language.

It is widely held in Western philosophy now that thinking is impossible without using language. Navyanyāya shows the inadequacy of such a theory. It points out that using language is not possible without understanding the meaning of words, expressions and sentences. But understanding the meaning of expressions is an altogether different type of activity from the activity of perceiving, inferring, etc. Even if thinking be regarded as sub-vocal speech it nevertheless requires understanding the meaning of expressions used. The difference between understanding the meaning of ex-

pressions and other forms of awareness like perceiving, inferring, however complex those may be, is fundamental. The act of understanding the meaning of expressions is typically exemplified in reading or hearing what others write or say, and this act is unlike inferring, etc. So acts of awareness like inferring, etc., cannot be identified with understanding the meaning of expressions.

But, although inferring is not speaking, still isn't inference impossible without using language in some form or other? The reply to this question is not difficult to find. If inferring, for example, is not identical with speaking or soliloquizing, then if such activity is necessary it must be so only as a subsidiary process. This will lead to the theory that an act of cognizing like perceiving, inferring, etc., is really not one act, but is to be analysed into different sorts of acts—one of inferring and another of speaking, going on simultaneously in the mind. But this is an implausible theory and involves insuperable difficulties of all sorts. We can ask, for example, how can two altogether different types of cognitive acts be performed simultaneously? The theory also runs counter to introspective evidence. So Navyanyāya holds that an act of perceiving, inferring, etc., is not the same as speaking or whispering, that different acts cannot be simultaneous, that language is necessary only for expressing an act of awareness, and that the act of expressing is a subsequent and different type of act.

Next, let us consider a false awareness. If an awareness is false then the content cognized, namely a–(R–b), is not a reality. Thus, *a* as related to *b* by the relation R is not an actual existent. For example, if we cognize a certain thing as piece of silver when it is not, then according to Navyanyāya the content of this false awareness is of the form this-inherence–silverness. Yet although the relation cognized here is the relation of inherence, that relation does not actually obtain between the thing presented as *this* and the property of *silverness.* So even though the relation is a dyadic relation, yet because the awareness is false its two terms are not *this and silverness,* though the content of the awareness is of the form this–(inherence–silverness). The problem then is: This false awarness, being a propositional awareness, must have a qualificand and a qualifier, yet the qualificand and the qualifier cannot be identified with the first and the second terms of the relation of inherence which is manifested as the relation of the awareness.

But how are we to define what is cognized and the elements constituting what is cognized except in terms of the awareness itself? According to Navyanyāya in introspection when we become aware of our awareness we also become aware of all the special relations into which the three elements of its content enter with the awareness.

The awareness is related to its qualifier in one characteristic manner, to its qualificand in another characteristic manner, and to the qualification in a third characteristic manner.

We may represent this schematically as follows:

Awareness

1 3 2

a R b

The one awareness is related to *a* in the first characteristic manner, to *b* in the second characteristic manner, and to R in the third characteristic manner. These special relations in which the awareness is related to the three elements constituting its content become evident, and unmistakably identified, in introspective awareness. Thus we can define the "qualificand of an awareness" only in terms of the specific relation in which the awareness is related to it. So also in defining "the qualifier of the awareness" we have to make use of the introspective awareness of the special relation in which the awareness is related to it. And likewise with the relation which is the qualification we have to make use of a very special relation in which the act of awareness is related to it. These very special relations of one and the same act of awareness to the three elements of its content are introspectively differentiated and identified unerringly.

Now how do we fix the relation R in the content a-(R-b)? Not by resorting to the ontological situation, but rather by introspection. This appeal to introspective awareness in order to fix the relation R is necessary for Navyanyāya philosophers because there is nothing in the nature of entities which makes relations distinct from other entities. Relations do not form a separate ontological category, but are entirely relative to situations. Thus R, which is a relation between *a* and *b*, will itself be a term if we ask: What is the relation between R and *a*? According to Navyanyāya what is a relation in one context or situation will be a term in another context. So if we want to fix on something as the R in a-(R-b) we have to refer to the awareness of a-(R-b).

That what functions as a relation in a particular content of awareness is cognized in a special and very determinate way is shown in Navyanyāya by its theory that in the linguistic expression of what is cognized the relation can never be represented by a word. We have already seen that according to Navyanyāya qualifiers of awarenesses, i.e., modes of presentation of the things cognized, cannot be expressed in language except through predicative expressions whose modes of presentation have then to be understood. Now

Navyanyāya holds that no relation can ever be expressed by words, for if a relation is expressed by a word, then it is no longer meant as a relation, but rather it is meant as a term. A relation is always understood from the word order of the expression representing the content of an awareness. The mode of presentation of an object in an awareness *can* be expressed in language, but if it is, then a higher mode has to be understood. But a relation can never be expressed by any word.

How then can Navyanyāya explain the possibility of a false awareness? For in a false awareness the relation R does not really unify the two elements *a* and *b* together. So the question arises: what is the content of a false awareness? According to Navyanyāya, even in the case of false awareness the three elements *a*, R and *b* are all real. Only the a-(R-b) unity is not real. But that does not mean that the unity is made by the cognitive act which goes wrong and produces a false awareness. Even in false awareness we can find by introspection three characteristic relations, different from each other, in which the one awareness is related to each of the three elements in its content. According to Navyanyāya in all cases of illusory perception, and false awareness generally, the content has to be analysed into its parts or elements, and since a false awareness is necessarily a propositional awareness, the elements will always be three, a relation and its two terms. All these three elements are actually existent, but it is not necessary that the three must form an actual existent "fact" in order to be cognized.

It was said earlier that Navyanyāya has developed a technical language adequate for serious discussion. In order to understand the need for and nature of this technical language it is necessary to realize the inadequacy of ordinary language, i.e., ordinary Sanskrit.

The problem is: How can we talk about awarenesses, which are inner states? It is necessary somehow to communicate these inner states of awareness through language. So we shall have to examine how cognitive states can be communicated. One natural answer will be that to talk about cognitive states one has to *express* them in language. But according to Navyanyāya to express an awareness in language is to say what is cognized in the cognition, is to represent its content. Thus if I perceive that the chair is brown, what I shall say in expressing this awareness is simply "the chair is brown." This expression describes a content, not an awareness.

In contemporary Western philosophical analysis it is regularly assumed that a proposition is something which remains constant even though the so-called propositional attitudes change. Thus the proposition that the chair is brown remains the same proposition whether I assert it, doubt it, entertain it, or reject it. But according

to Navyanyāya the so-called proposition is not something which remains constant through these different propositional attitudes. Rather, they say that since a judgment and a doubt differ in that the former is a state of belief or certainty while the latter is a state of uncertainty, i.e., since these attitudes differ psychologically, what is believed and what is doubted cannot be identical. The content of belief, for example, will be "the chair is brown"; the content of doubt will be "the chair is either brown or green." There must be a difference between the contents of belief and of doubt.

Furthermore, since Sanskrit has no articles and finite verbs are not mandatory in expressing contents of awarenesses, the content of the awareness of the brown chair may well be expressed by the Sanskrit phrase equivalent to English "brown chair". Semantically, what this expression conveys is that some one thing is both a chair and brown, that an identity relation obtains between the chair and the brown chair. Yet so far as the content of the awareness is concerned, it is the relation of inherence which obtains between the brown color and the chair. Thus the relation cognized is inherence, while in the language one has to use to express the awareness the relation semantically made necessary is the relation of identity. And generally, the relation which has to be understood in order to construe grammatically the words constituting a description of the content will not be identical with the relation which is cognized as the qualification obtaining between the qualificand and the qualifier. So, even though it is necessary to express our awareness through language, the linguistic units will require some relations to be understood in order to form a unified expression, and this relation will not normally be the same as the relation between the qualificand and the qualifier, i.e., will not be the relation which is cognized.

That is why it becomes necessary to *describe* our awarenesses in a technical language. If we want to describe the awareness expressed by the expression "brown chair" it will be as follows: it is an awareness which has the brown color as its qualifier, the chair as its qualificand, and inherence as its qualification. Of course, this technical language again has to be understood grammatically, but then here we have expressed the qualifying relation by a relation word, so this language is really a second order language where what has to be understood in the first order language is made explicit. Indeed, in such a second order technical language the qualifiers, i.e., the modes of presentation of the elements involved in the content, which have necessarily to be understood when we want to express our awareness in language, can be explicitly named. Thus the awareness expressed as "brown chair" is to be described even more perspicuously as follows: it is that awareness the qualifier of which

is brown color cognized under the mode of the property of brownness, the qualificand of which is the chair cognized under the mode of chairness, and the qualification of which is the relation of inherence. The special feature of this higher order language is that what was understood as a manner or mode of presentation when an awareness is expressed in ordinary language has become explicitly named in this higher-order-language description, and the higher-order-language therefore is not the ordinary expression of an awareness.

In Navyanyāya parlance the phrase "under the mode of" in higher-order descriptions of the above sort is rendered through use of the technical notion of a "limitor" (*avacchedaka*). Specifically, the part of the description offered in the preceding paragraph which speaks of "the qualificand of which (awareness) is the chair cognized under the mode of chairness" will be rendered by "the property of the qualificand, resident in the chair, is limited by the property of being a chair." But the qualifier (here, the brown color) also has got to be cognized under its own mode; so according to Navyanyāya this entire awareness can be perspicuously represented in the technical language as "the cognition which has its qualifierness limited by brown(color)ness and by inherence, and whose qualificandness is limited by chairness."

If we understand that the concept of the limitor is the concept making explicit the modes of presentation of the qualifier and the qualificand, we can then indicate certain rules concerning limitors. First of all, if one object is cognized under more than one mode then all the modes become, separately, limitors of the qualificandness or the qualifierness in this cognition. According to the older school of Navyanyāya, when a thing is cognized under a mode which is a heavier property, then the limitor should be a lighter property, wherever possible, if it is coextensive with the heavier property. For example, when something is cognized as *possessing a certain shape, etc.* rather than as a *jar*, according to this older school it is *jarness* that should be regarded as the limitor of the qualificandness, and not the property of possessing a certain shape, etc., since this latter property is analyzable and so heavier, while *jarness* is a simple property and lighter. But according to Raghunātha Śiromaṇi and the "new" wing of Navyanyāya this is a wrong application of the principle of parsimony, which they say should only be applied in ontology, not in epistemology. According to Raghunātha, if a jar is cognized under the mode of having a certain shape, etc., then that property should be the limitor of the qualificandness, not *jarness* which is not the mode under which the qualificand is cognized. According to Raghunātha, which property is the limitor of the qualifierness or

the qualificandness is to be determined by introspecting to see under which modes the qualifier and the qualificand have been cognized.

The concept of limitor is used in Navyanyāya for various other purposes as well. It is sometimes wondered how Navyanyāya can dispense with words indicating quantity while discussing universal judgments, for example. The answer is that in Navyanyāya the quantity of an awareness is always understood, not expressed in the first-order representation of it; its representation comes in the higher technical language in terms of the limitors of the qualifier and qualificand. By the "quantity" of an awareness we mean whether the awareness concerns a single item falling under a description, some of them, or all of them. E.g., when the qualificand of an awareness is expressed by the word "cow", there is nothing in the word to indicate whether the reference is to Bossie here, a group of cows, or all cows there ever were, are or will be. By contrast, the "quality" of an awareness—by which we mean the positive or negative force of the awareness—is indicated directly in the expression of it through the use of the negative particle.

To illustrate through an example. Suppose one expresses his awareness by saying "here there is absence of cow." There is no indication from what has been said as to whether the absence of all cows is intended or the absence of a particular cow is meant, for the Sanskrit expression whose English literal translation we have just provided is ambiguous as regards the quantity. In Navyanyāya this ambiguity is always resolved by appeal to the manner in which the cow is cognized. If I cognized the cow under the mode of *cowness* then "absence of cow" will mean the absence of all cows (i.e., there are not any cows here). If the cow is cognized under the mode of its particularity as that cow, then "absence of cow" will mean absence of that cow (i.e., the awareness is that Bossie is not here). In the higher order language we shall say that the cow whose absence is cognized, i.e., the cow which is the counterpositive of the absence in question, has counterpositiveness limited by *cowness*. Thus the sign of quantity which is absent in the expression of an awareness is always to be understood and can be expressed only in the higher order technical language by means of the concept of limitor.

This use of the concept of a limitor is only one use of that concept. It is technically called the limitor as self-linking connector (*svarūpa-sambandha*), and has to do with the mode under which an object is cognized. The concept of limitor explicated in the previous chapter has to do with objective features without reference to awareness. Actually, these two concepts, though designated by the same term "limitor", do not have anything essential in common, and therefore do not admit of one definition.[6]

An objection might be raised at this point to the effect that the Navyanyāya analysis of an awareness saddles it with an infinite regress. The analysis requires that in every propositional awareness a qualificand is cognized through a qualifier, and the qualifier, in turn, has to be cognized through a second-order qualifier, i.e., a limitor, and so on. This threat of a regress does not bother the Navyanaiyāyikas. For there is no regress of entities involved here. The distinction between qualificand and qualifier is not an ontological distinction. One and the same entity can, and in various cases does, function in a cognition in two capacities of qualificand and qualifier. For example, when we cognize that a jar is identical with itself, the relation cognized is identity, and its two terms, the qualificand and the qualifier, are the same entity, viz., the jar.

I. SUBSTANCE

Characteristically, Navyanyāya discussions of substance tend to collect around the defining characteristic of substance, that is, substanceness. Udayana offered several definitions of substance, one of which was that a substance is a thing which is not the locus of an absolute absence of qualities.[7] But, objects the Advaitin Citsukha, your doctrine requires that a substance exist for a moment before it acquires any qualities; so the definition just offered fails to cover such a substance. Śeṣa Śārṅgadhara's answer is that the substance at that moment is qualified by being at that moment, so it isn't the locus of an absolute absence of qualities. Śaṃkara Miśra utilizes this definition of Udayana's, and Raghunātha Śiromaṇi also defends it.

A. *Atomic Theory and the Theory of Cooking.* For the most part the Navyanaiyāyikas of this period appear to have accepted Praśastapāda's account of atomic theory and cooking. The exception is Raghunātha Śiromaṇi. Raghunātha dispenses entirely with atoms and dyads. For him the smallest substance, indivisible, is the minimal perceptibilium (*truṭi*). The arguments of Praśastapāda and the tradition that follows him are dismissed on the ground that they produce infinite regress.[8] Raghunātha is aware that his theory is not original with him—he associates it with the Bhaṭṭa Mīmāṃsakas, and Bhaduri points out that it was criticized many centuries earlier by Uddyotakara.

B. *Earth, Water, Fire, Air.* Both Vardhamāna and Śaṃkara Miśra support the view of Vyomaśiva[9] and Udayana (against, e.g., Śrīdhara) that trees are alive and constitute organic bodies. Otherwise nothing startlingly new is suggested about earth by these writers. The same is true of water.

Śaṃkara Miśra classifies fire into four kinds according to whether

its color and/or touch are manifested or unmanifested. Thus the sun's rays are fire where both color and touch are manifested, while in the fiery sense-organ, i.e., the visual organ, both color and touch are unmanifested (otherwise it would be seen and it would burn things up that are seen by it). In hot oil the touch but not the bright color is manifested, and in gold the color but not the hot touch is manifested.

Gaṅgeśa gives an entire, though small, section to the topic of gold. The occasion is the position taken by Mīmāṃsakas that gold is an earthy object. Gaṅgeśa refutes a number of arguments purporting to establish the Mīmāṃsā thesis. For one thing, gold is not bright, as it ought to be according to the analysis in the previous paragraph. Gaṅgeśa's answer is that, though gold has manifested color, being a fiery object, its brightness is overcome by the color of the earth that surrounds it, which is why we don't see gold in the dark. Gold can't be the surrounding earthy stuff itself, since it would be immediately burnt up by the fire inside; the reason the surrounding earth doesn't get burnt up or change color is because it is in contact with something which has accidental liquidity, viz., fire.

Cennu Bhaṭṭa and Jinavardhana also have extensive discussion of gold. Śaṃkara Miśra implies that the moon is also a fiery object.

A classical problem concerns the proof of the existence of air or wind. In the older literature it had been proved by inference, [10] on the assumption that it is not perceptible and thus cannot be proved through perception. The reasoning is as follows: since air is (doctrinally) supposed to be without any color, and since possession of manifested color is a prerequisite of perceptibility (again doctrinally), it must follow that air is not perceptible. This, however, does not seem to be a happy outcome. The responses of Navyanaiyāyikas range from attempts to justify the tradition (Gaṅgeśa) to complete rejection of possession of manifested color as prerequisite of perceptibility (Vyomaśiva and later, Raghunātha Śiromaṇi).

Gaṅgeśa again devotes an entire section to the topic. Although we cannot be clear that Gaṅgeśa is actually reporting Vyomaśiva's views consciously, he summarizes the sorts of arguments presented by Vyomaśiva[11] and unlike his predecessors, answers them.[12] Vyomaśiva's position was that when Kaṇāda says that possession of middlesizedness, composition and color is the prerequisite of the perceptibility of a substance[13] he doesn't mean that all three have to be present in every case of perceptibility. Rather, they are disjunctive requirements, so that, e.g., the self can be perceived because it has middlesizedness, composite perceptible substances satisfy all three requirements, and air satisfies two out of the three—viz., middlesizedness and compositeness. Furthermore, it would seem that air (wind) is tactually perceived, and Kaṇāda's requirements seem to be

addressed to visual perceptibility rather than perceptibility by other organs. Therefore, concludes Vyomaśiva's position, or at any rate the position opposed to Gaṅgeśa's tradition, possession of compositeness and middlesizedness together with manifested color is the condition for visual perceptibility, while the first two coupled with manifested tangibility constitute the conditions for tactual perceptibility, conditions that air satisfies. Therefore air is perceptible.

Gaṅgeśa, however, insists that both manifested visibility and tangibility are required for perception. Otherwise, he says, we should be able to perceive things such as the warmth of summer, hot wind, and such things, and so we should also be able to perceive their size, contact, disjunction and motions, which is absurd. He says that is the view of the "new school", but adds that there is also an opinion supporting the original view of, e.g., Praśastapāda, that possession of manifested color alone (together with middlesizedness and compositeness) are the requisite conditions.

C. *Time and Space.* Śaṃkara Miśra, presumably recognizing that some members of his school were proposing the reduction of time, spatial direction and *ākāśa* to a single substance, is moved to inquire what the intrinsic distinction between time and space in fact is. In *Kaṇādarahasya* he proposes that the difference is that temporal divisions are the same for everyone, while distinctions among spatial directions are relative to the location of the person appealing to them. In the *Upaskāra* on the *Vaiśeṣikasūtras* he explicitly notes and rejects the reduction of spatial direction (*dik*) and time (*kāla*) to a single substance, giving essentially the same reason in more picturesque fashion. He adds other reasons, some not very convincing.

Raghunātha Śiromaṇi not only accepts the reduction of spatial direction and time to a single entity, he goes farther and treats these two as identical with the self we call "God". In this he follows at least one earlier author, Aparārkadeva the commentator on Bhāsarvajña.[14] Raghunātha announces this reduction in his *Padārthatattvanirūpaṇa;* in other places, such as the *Kiraṇāvalīprakāśadīdhiti,* he seems to accept the older distinctions among these ubiquitous substances at least for the sake of argument.

D. *The Internal Organ.* The traditional view of the size of the internal organ in Nyāya is that it is imperceptibly small (*aṇu*). Gaṅgeśa devotes an entire, though short, section to the defense of this thesis, in the course of which some fresh opposing views about the nature of the internal organ are developed by the opponent, only to be carefully considered and rejected by Gaṅgeśa. Some of these views are referred to in subsequent discussions of the same topic by Vardhamāna, Śaṃkara Miśra, and others.[15]

E. *Selves.* Jinavardhana appears to have proposed an Advaitin interpretation of "*ātman*" and attempted to combine it with the Nyāya theory. However, the general thrust of the Nyāya authors covered in this volume is toward criticism and rejection of Advaita tenets, though many authors will cite Upaniṣadic passages where they believe such can be squared with Nyāya theory.

F. *God.* It will be seen by consulting the section on God in the Introduction to Volume II that the major questions about God raised by older Naiyāyikas relate to His nature, whether He has a body, and the arguments for His existence. These very topics occupy the limelight in Navyanyāya discussions of God as well, along with a growing concern that God's awareness, with its peculiarities, not be excluded from general definitions of "awareness" and other epistemological notions.

After Udayana's refutations of Buddhist arguments, with the possible exception of Vallabha, the most important contributor to discussions of theism in Nyāya is Śaśadhara. Indeed, Gaṅgeśa can be seen to have had Śaśadhara's treatment very much in mind, as John Vattanky has shown in his detailed discussion.[16] In particular, the way in which Gaṅgeśa goes about his task in the section of *Tattvacintāmaṇi* devoted to God is precisely that of Śaśadhara. Both consider various ways of expressing the main terms of the cosmoteleological argument that Nyāya offers for God's existence. The procedure begins with an opponent's section in which possible formulations of the *pakṣa, sādhya* and *hetu* of such an argument are reviewed. In the *siddhānta* section in which the correct view is propounded Śaśadhara gives and defends correct formulations of each of the terms. Gaṅgeśa follows a somewhat different plan: he provides the entire argument, or rather, several versions of the entire argument. Still, the formulations of the terms in those full statements can be seen to depend to a large extent on Śaśadhara.

If Gaṅgeśa depends so fully on Śaśadhara what, if anything, is original in his own treatment? Well, he does not change anything in the Nyāya position, although we saw that Udayana displays some ambivalence on certain points—such as God's having a body—on which Gaṅgeśa adopts a consistently clear position with a generous defence. Gaṅgeśa's contribution is to develop Śaśadhara's definitions, add some technicalities of his own, and in general to answer explicitly or by implication the objections of (mainly) Buddhist authors against theism. This is all done in a somewhat formal and technical fashion.

The form of this technical method is straightforward enough. In the opponent's section each of the three main terms in the classical inference are criticized by the opponent, who attempts to demon-

strate that all relevant formulations involve commission of fallacies of one sort or another. The *pakṣa*, *sādhya* and *hetu* are taken up in turn in this way. In the "correct view" or "*siddhānta*" section Gaṅgeśa sets forth three carefully qualified and clarified forms of the cosmoteleological argument for the existence of God. They are all considered to be valid. Then the *p*, *s* and *h* terms of each are defended from various objections both of the sort produced in the *pūrvapakṣa* section earlier and others that arise for the first time. These objections cover the various criticisms that were urged by Buddhists of former times and especially by Mīmāṃsakas of Gaṅgeśa's time. For example, the problems relating to the question whether God must have a body in order to create are taken up in the course of these discussions, and Gaṅgeśa is able to defend the interpretation that God is completely bodiless (an interpretation which, as we saw, Udayana is less clearly committed to). Likewise, God's eternality, His existence despite not being perceptible, His desire, awareness and effort and how they differ from those of ordinary selves, are all topics which come under consideration.

Gaṅgeśa depends entirely on the cosmoteleological argument, and does not offer the argument from language and thought nor the negative ontological argument, which were proposed by some of the old Naiyāyikas. However, Gaṅgeśa does agree that God is the author of tradition; indeed, it is God who promulgates the original conventions governing the meanings of words, for example. However, only a brief section relates to this function of God's.

Among the authors that follow Gaṅgeśa over the next century or two, Vardhamāna shows clear awareness of his father's contribution, as do those who comment on the *Tattvacintāmaṇi*. Others, however, key their discussion of God's nature and existence to Udayana's work, sometimes because they are commenting on it, sometimes not, but with surprisingly little reference to either Śaśadhara or Gaṅgeśa.

As for the commentators on *Tattvacintāmaṇi*, to the extent that we can tell, few show much originality in their discussions, with the exception, as usual, of Raghunātha Śiromaṇi. Raghunātha has some interesting remarks to make about God in various places among his works. We have already noted that Raghunātha collapses time, spatial direction and *ākāśa* with God to highly simplify the Vaiśeṣika list of substances. In another place[17] Raghunātha shows more than any other up to his time a growing awareness of the threat that devotionalism poses for Nyāya theory. He has in mind a view according to which knowledge of God is the cause of liberation. Raghunātha insists that it is self-knowledge, not knowledge of God, which is the required condition, and engages in some interesting Upaniṣadic

exegesis to demonstrate the difference. He is careful to distinguish his aversion to devotionalism from his position towards Advaita Vedānta, which has led some (for example, Professor Varadachari in his summary below) to attribute "Advaitic leanings" to Raghunātha. (This is not the only point at which such leanings have been supposed to be displayed.)

II. Qualities and Motions

The second Vaiśeṣika category is that of *guṇa*, the particular qualities of particular substances. The student of classical Vaiśeṣika will recall that seventeen of them were mentioned in the *sūtras*, and that Praśastapāda added seven more to make the canonical list of twenty-four.

There is apparently some discomfort felt about the principle by which we classify these twenty-four together under the rubric "quality". Such discomfort is fairly apparent in Vardhamāna's discussion at the beginning of the *Guṇa* section of *Kiraṇāvalīprakāśa*. The occasion for discomfort is the Bhūṣaṇakāra's proposal to make motions, the third major category in Praśastapāda's system, into a twenty-fifth quality. Since both qualities and motions are related to their loci by the same relation, inherence, it is a puzzle how one is to characterize the principle which will distinguish the twenty-four classical qualities from motions. One can, of course, say that qualities are those specific properties of particular things which are not motions, but this is rather obviously *ad hoc*. At best it will leave us without a proper universal which characterizes the twenty-four classical qualities, since a "proper" universal must satisfy a number of tests (authoritatively laid down in the *Kiraṇāvalī* by Udayana) of which crossconnection (*jātisaṃkara*) is one. If both qualities and motions behave in relevant respects in the same way, then the properties of qualityness and motionness will apply to all and only the same things, which constitutes crossconnection if we suppose qualities and motions to be different kinds of things. Vardhamāna's solution is to admit that qualityness is not a proper universal. Presumably then it must be an *upādhi* or imposed property.

Subsequent writers prior to Raghunātha Śiromaṇi, such as Śaṃkara Miśra, do not address this issue directly but content themselves with providing definitions of qualityness and motionness which differ. They are also ultimately *ad hoc*, however. It is Raghunātha who takes the bull by the horns, characteristically, and declares flatly that qualityness is not a proper universal, on pain of having to postulate an infinite number of universals of that sort, as well as for the reason of crossconnection. It is, for him as for Vardhamāna, a "partless" (*akhaṇḍa*), "distributive" (*vibhājaka*) imposed property (*upādhi*).

On Raghunātha's view, then, there is no single cognizable property shared by the twenty-four items in the classical list; each has its distinctive property by which items described by each of the twenty-four quality-kind-terms (viz., "color", "smell", "contact", etc.) are distinguished and identified. This presumably undercuts the question whether motion is a twenty-fifth quality, since there is now no general principle upon which items are classed as qualities and which not.

Classically, qualities were classified in several ways. One distinction sometimes cited is that between specific and generic qualities, used by Vātsyāyana and others in distinguishing an individual material (*mūrta*) substance. Generic qualities are identified by Praśastapāda as number, size, separateness, contact, disjunction, farness, nearness, weight, instrumental fluidity, and impetus.[18] The rest are specific qualities. Udayana in his commentary on that section (not summarized in Vol. II) attempts to define specific qualities as those qualities that have "lower" or "specifying" (*avāntara*) universals differentiating the substances which are their loci,[19] i.e., qualities which have varieties that are limited to qualifying specific kinds of substances. Various authors studied in the present volume complain that Udayana's definition overextends to include unwanted qualities within the scope of "specific" ones. Notably, Vardhamāna and Śeṣa Śārṅgadhara propose various alternative definitions, some acceptable and others to be avoided. Raghunātha in turn analyzes and criticizes Vardhamāna's definitions.

Praśastapāda distinguishes between those kinds of qualities that are locuspervading and those that may or may not not be. The latter group includes contact, disjunction, sound, and the specific qualities of the self. The rest are always locuspervading. Vardhamāna defines "x is not-locuspervading" as "x's having the same locus as its absolute absence". To understand this one has to understand that, remarkably, the later Nyāya notion of an absolute absence is that it is compatible with the concurrent occurrence of its counterpositive, analogously to the existence of a universal at the time and place where it does not occur in any individuals.

Raghunātha points out that, although classically each kind of property must be either locuspervading or non-locuspervading, the assumption need not be binding. Some colors may be locuspervading, others not, and thus the problem occasioned by a thing's being mottled or "variegated" (*citra*) resolves itself: there is no need to postulate an additional kind of color called variegated-color. The same analysis allows some touches, tastes, smells and motions to be non-locus-pervading.

Still another distinction among the qualities is that between those that have arisen or are "manifest" (*udbhūta*) and those which, though present, are unanifest (*anudbhūta*). The distinction is necessary since Vaiśeṣika doctrine has it that atoms have colors (otherwise how to explain the colors of the wholes produced from them) and yet we cannot see atoms. Thus a condition for visual perceptibility of a substance is said to be its possessing manifest color. The color of an atom is unmanifest.

Gaṅgeśa points out that manifestedness may be understood as the property of those qualities which possess a universal pervaded by colorness (in the case of manifested color; likewise for the other sense-qualities). In that case, however, manifestedness cannot be considered a proper universal, since instances of the same kind of quality—a color—may be either manifested or unmanifested. This deviates from tradition, which viewed the two properties as proper universals.

Raghunātha notes that not everyone accepts unmanifested qualities. Air, for example, which appears colorless, *is* colorless, even though it is perceptible. Again, if the visual organ is a middle-sized colored substance with tangible qualities it should be perceptible. To account for the differences among substances in their ability to be visually or tactually experienced by postulating different manifested or unmanifested qualities in each case is highly complex. One feels that Raghunātha sympathizes with the intentions of the "independent" thinkers who take this line, although he has doubts about the viability of the positive proposal they make. In the *Padārthatattvanirūpaṇa* he accepts their view, denying the existence of unmanifested colors, and citing the various streamlining aspects of the rejection of unmanifested qualities.

1. *Color, Taste, Smell, Touch.* How to define that which colors have in common and differentiates them from tastes, smells, etc.? Śaṃkara Miśra proposes that colorness is the universal property *being perceptible by the visual organ only.* He insists that it is a proper universal, since if it were only an imposed property we should not immediately experience color when our eye falls on a red quality; we should have to momentarily consider and construct the red. For the same reason, redness, blueness, etc., are also proper universals. An objector who wishes to treat shades of color, such as blue, as each a single, eternal entity is refuted.

Raghunātha Śiromaṇi, however, states that colorness, as well as blueness, etc., are imposed properties (*akhaṇḍopādhi*), without giving any reason. Presumably *his* reason is that, as we saw, he treats *all* universals as imposed properties, and thus feels no need to answer Śaṃkara Miśra's argument.

We saw above that opinions vary in the tradition about whether there is a color called "variegated" or not, with Raghunātha characteristically in the negative, most everyone else in the positive. A parallel discussion arises about the existence of a variegated kind of taste, smell, etc. The question is raised in the following terms: The myrobalan (*harītakī*) tree produces a fruit which presents different tastes under different circumstances. Shall we then say that the myrobalan has variegated taste, on analogy with the variegated color admitted by most Naiyāyikas?

Vardhamāna answers no. Rather, he suggests, the myrobalan should be held to possess six different unmanifested tastes, each of which is manifested under appropriate circumstances. He takes the matter up in at last three different places, so one infers the issue is of some importance for the theory in his opinion. Tradition does speak of a taste called "*kṣara*" which has sometimes been interpreted as referring to a variegated taste. Vardhamāna suggests it means "salty", and that it is one of the several kinds of taste possessed by the myrobalan. What happens is that when we taste a piece of myrobalan fruit one of the several kinds of taste-quality is manifested in the portion we taste but not the others. In the case of color we see an entire mottled surface, a whole possessing variegated color; in the case of tasting the fruit we do not taste the entire fruit. The rule which causes the difficulty, a rule Vardhamāna feels it is important to observe strictly, is that a whole has the quality of its parts. Since we never taste a whole at once, but only the several bites of it, we need not suppose that the whole manifests all the several tastes at once, and thus in turn we do not need to postulate a variegated taste in order to protect the rule.

Despite Vardhamāna's efforts a few later Naiyāyikas continue to speak of variegated taste. E.g., Jinavardhana and Mādhava Sarasvatī are cases in point. For the most part, however, Naiyāyikas following Vardhamāna reject variegated taste whether or not they accept variegated color.

2. *Number.* Bhāsarvajña, author of the *Nyāyabhūṣaṇa*, denied that number was a quality at all. Among the writers surveyed here only Raghunātha Śiromaṇi agrees with the Bhūṣaṇakāra in this regard. However, Raghunātha's view is, as usual, unique. Raghunātha proposes that number be accepted as a separate category in addition to the classical Vaiśeṣika seven (or what remain of them after his critique). His reason is that we cognize numbers not only of substances but of qualities and other things—since if number were a quality it could only reside in substances, we need a category which is not restricted in that way. The classical way out of this problem—for the old school was aware that we can count qualities and attempted

to explain that fact by appealing to a relation called inherence of two-qualifiers-in-one-locus (*samānādhikaraṇatā*)—is considered and refuted by Raghunātha.

Bhāsarvajña's proposal was to treat numbers larger than one in terms of difference. Another quality in the classical list is separateness; the separateness of two things (*dvipṛthaktva*) may be considered to perform all the necessary functions that duality (*dvitva*) is classically supposed to perform. Vardhamāna objects to this argument: our awareness of duality and separateness-of-two have different causal conditions, he responds, since to cognize the number we may not be aware that there are *only* two things while we must cognize that in becoming aware of the separateness of two things. Raghunātha rejects Vardhamāna's rebuttal; he asserts that the two have precisely the same causal nexus and thus are not different. Given Raghunātha's belief that number is a new additional category we may understand that he denies separateness of two things though not the quality separateness itself.

Bhāsarvajña also proposed to treat unity—the number one—as a universal propety (*ekatva*), and his follower Aparārkadeva tends to treat all numbers as universals. Vardhamāna, following Udayana, argues that unity is not a universal, since if it were we should speak of the unity of duality. Raghunātha remarks that we do indeed say just that, though Raghunātha doesn't treat unity as a universal. As for the numbers from two on up, Vardhamāna does not think they are proper universals, following Udayana and Vallabha in his arguments. Raghunātha reviews a host of opinions on this topic without clearly indicating his affiliation with any one of them.

Running through this discussion of the categorial status of number is the important question of how numbers come into being at all. Praśastapāda traced the production of numbers to what he called an "enumerative cognition" (*apekṣābuddhi*), suggesting that duality, e.g., comes to be in two things—each one itself a unit—when we consider the two as a group. However, we must not confuse this enumerative cognition which produces duality with the subsequent cognition in which we cognize that duality. The enumerative cognition actually produces first a nonpropositional awareness, which then in turn produces the propositional awareness of duality, and finally we come to have a qualified awareness of two things in front of us. Sadananda Bhaduri reports this account, and also reconstucts the Vaiśeṣika argument against Mīmāṃsakas who think numbers are in existence before the enumerative cognition.[20] He points out, too, that the problem of how a thing can be one (by nature) and two (as member of a group) is resolved in Navyanyāya by the postulation of a relation called *paryāpti*; this is the relation by which duality

(the number 2) resides in the two items collectively. This relation seems to have been first introduced by Raghunātha Śiromaṇi in his *Avacchedakatva* section of the *Tattvacintāmaṇidīdhiti*.

Śrīdhara and Udayana differed on whether "manyness" (*nānātva*) is to be included as a very large number. Śrīdhara thought manyness is a number, since one can be aware of plurality without being able to count, while Udayana denied this since it is always the case that a group, however large, is of some definite number or other. Śaṃkara Miśra adds a new suggestion to this debate: he argues that any group above two has two numbers, the actual number of members plus the number *many*. This explains how we can cognize that there are many things in the distance without cognizing any particular number of them.[21]

3. *Contact and Disjunction*. Vardhamāna and Raghunātha appear to differ slightly on the question whether the self comes into contact with other substances, e.g., atoms. Raghunātha says it does. Vardhamāna says this is not literally contact.

Śaṃkara Miśra considers the view espoused by Bhāsarvajña, that there is no such quality as disjunction since disjunction is just the absence of contact. He argues that none of the possible kinds of absence fit. In the main, these discussions reflect older treatments and arguments.

4. *Size and Shape*. The classical qualities farness and nearness are rejected by Raghunātha on the ground that everything that needs to be said about these relations can be said in terms of spatial and temporal relations among entities without invoking such qualities. In this he once again follows the Bhūṣaṇakāra. Raghunātha remarks that on his view all substances need not have size, and thus God can be a substance even though he has no size. He adds that size terms are comparative: "small" (*aṇu*) is used to mark something judged relatively smaller than something else.

5. *Psychological Qualities: Awareness, Pleasure, Frustration, Desire, Aversion, and Effort.* As Nyāya becomes Navyanyāya one of the results is a vast increase in attention to theories about awareness (*jñāna*). We have consequently devoted a whole preceding section (Chapter 2) of this Introduction to that topic.

6. *Dispositional Qualities: Weight, Fluidity, Viscidity, Inertia, Elasticity, Mental Traces.* An object's weight was cognized only by inference, according to the old Vaiśeṣika theorists. However, Vardhamāna suggests that weight is sometimes perceptible through touch assisted by *adṛṣṭa*. Śaṃkara Miśra says that this view goes back to Vallabha.

Śaṃkara Miśra specifies liquidity as well as viscidity as conditions

for the agglutination of bodies, agreeing with Vātsyāyana in contrast to Praśastapāda and Śrīdhara.[22]

Vardhamāna tries to clarify the role of mental traces in experience. When we remember something traces provide the relation between the present cognition and what is remembered; however, a trace cannot serve as the causal condition *par excellence* (*karaṇa*) since that condition must "have an operation", i.e., must be what triggers the experience at that moment rather than some other time. In recognition (*pratyabhijñā*) traces only function indirectly through the memories involved. They also function in determining the content of perceptual awareness, etc.

7. *Merit and Demerit, and Adṛṣṭa*. Śaṃkara Miśra drops the fascinating comment that what the Advaitins call *māyā* and the Sāṃkhyas call *prakṛti* is actually just *adṛṣṭa*. It is not clear in precisely what connection he is proposing this equation.

A new development in Nyāya literature, ushered in by Gaṅgeśa's extensive treatment in the *Śabdakhaṇḍa* of *Tattvacintāmaṇi*, is its interest in and attention to Mīmāṃsā topics such as the aim of life called *dharma* and its relation to the sentences (*vidhi*) in which *dharma* is enjoined. This is a part of the general orientation of Navyanyāya led by Gaṅgeśa toward Pūrvamīmāṃsā opponents and arguments. The Mīmāṃsakas were specialists in ritual, in exegesis and thus in language. Navyanyāya is characterized by its own version of the "linguistic turn", and it is not surprising it picked on the Mīmāṃsakas as foils for its own increasingly sophisticated linguistic analyses.

8. *Sound*. Rucidatta provides an extensive discussion of how sound travels depending on the air currents. Classical arguments as to why sound is a quality and not a substance, arguments directed against the Mīmāṃsakas, are reviewed by several of our authors.[23]

Cennu Bhaṭṭa and Raghunātha Śiromaṇi discuss how the last sound in a series gets destroyed. Praśastapāda is said to hold that each sound is destroyed by a sound produced subsequently to it, which would seem to mean that the last sound in a series goes on indefinitely. Therefore Cennu Bhaṭṭa provides a new account according to which the last sound is destroyed by the destruction of the previous, penultimate one.

Vardhamāna has a different problem with the traditional account, pointing out that to hear a sound it must last for more than a moment, and on the classical view the last sound will only last one moment at most. Raghunātha mentions another old view according to which the effect of the first sound destroys the cause of the last sound, which in turn destroys the last sound, thus preserving the account which traces the cause of destruction of any sound to its predecessor.

Raghunātha comes out with a positive theory which has a sound lasting for four moments, viz., the moment of its origin, a second moment when the air stops moving, a third of disjunction through the air movement, a fourth moment when the specific contact between that portion of *ākāśa* and air is destroyed. After those comes the moment when the sound is destroyed.

9. *Motion*. We have seen already that Bhāsarvajña proposed to count motion as a quality. As with other proposals of the *Bhūṣaṇakāra*, Raghunātha Śiromaṇi is the only one of our authors to accept this proposal. It is noticed, and argued against, by others, for example, by Vardhamāna.

III. Remaining Categories

A. *Universals*. The classical treatment of universals is, by and large, maintained throughout our period in the same fashion as in the older school. However, by Raghunātha's time the number of proper universals has, perhaps without its being recognized, dwindled away. The implications of Udayana's six requirements have gradually become recognized as precluding the status of a proper universal to just about any candidate. By Raghunātha's time there are virtually no universals. Instead, generic properties are treated as "composite" (*sakhaṇḍa*) imposed properties (*upādhi*), and the status of a separate category is sometimes granted to them. This allows Navyanyāya to bypass certain problems that had haunted earlier discussions, such as those about the supposed status of substanceness, qualityness and so on as universals. Since essentially nothing passes Udayana's requirements these generic properties are no different from supposedly "proper" universals such as potness. Umesh Mishra notes two prime reasons for classifying a property as "imposed" rather than universal: (1) if it's "always necessarily apprehended through something else", as are all the myriad properties such as locusness, qualifierness, and so on; (2) if it is a "composite" applying to individuals of more than one category.[24]

By reclassifying this legion of properties it is arguable that Navyanyāya makes a serious concession to idealism. Imposed properties have a questionable metaphysical role. While Raghunātha sturdily invents a new categorial status for them, it is not surprising that idealist critics, such as Advaitins, find in this reclassification evidence of the unstable character of Nyāya leanings. However, to pass judgment at this point goes far beyond our present function; we merely point out that one may well question on what gound all conceptual distinctions are accorded the status of ontological distinctions as well. Indeed, since, as we have seen, not *every* conceptually distinct item can be given a distinct ontological status, the problem is to provide

a satisactory criterion for demarcating ontological distinctions from merely conceptually convenient ones. It is to be expected that as Navyanyāya proceeded to develop after Raghunātha one finds attempts to reinforce this distinction, or else to ignore it altogether following classical Vaiśeṣika tenets.

B. *Individuators*. It is well known that Raghunātha rejected the individuator (*viśeṣa*) entirely as a category. As Ingalls notes, "He says quite properly that it is as reasonable to suppose that the atoms are by nature distinct, as to suppose further entities, whose nature it is to distinguish, residing in them. He deals with the blind belief in tradition in a manner not only scientific but not without humor. 'Yogis (are said to) see ultimate difference. Well, then, let them be asked on their oath whether they (really) see ultimate difference or not.'"[25]

C. *Inherence*. Gaṅgeśa devotes a chapter of his *Tattvacintāmaṇi* to inherence. In it, he tries to show that inherence is a separate category, that it is ineliminable, that it is perceptible, and it is single. Of special interest is the concluding defence of the theory against an opponent who argues that nondifference (*abheda*) can do the jobs inherence does. The argument is shown to founder on the inconsistency of holding that two different things can be nondifferent, but it is carried out in a highly technical fashion which already presages the convoluted character of later treatments.

Classical Vaiśeṣika held that there is only one inherence, that the appearance of different inherence-related pairs was unnecessarily "heavy". Thereafter throughout the "old" period of Nyāya-Vaiśeṣika that was the canonical view, not questioned but not much defended either. By Gaṅgeśa's time it had begun to be questioned. Śaṃkara Miśra mentions that some were of the opinion that there are many inherences and indeed seems to favor that view himself, though he does not clearly attack tradition. Raghunātha Śiromaṇi in predictable fashion does so, delcaring flatly that there are as many inherences as there are pairs to be related.

The ineliminability of inherence is defended vehemently by Gaṅgeśa as well as its perceptibility. The latter is equally vehemently denied by Śaṃkara Miśra.

D. *Absence*. One of the most arresting features of the development of Navyanyāya from Gaṅgeśa to Raghunātha is the remarkable increase in the use of absences as a means of quantification. This has been partly shown in preceding sections. However, there are a few points about the position of absence as a category that should be noted here.

One problem much on the mind of, e.g., Raghunātha Śiromaṇi concerns an absence whose counterpositive is itself an absence (i.e.,

the absence of an absence). Is *it* an absence or not? Since there is more than one kind of absence (e.g., prior, posterior, mutual, absolute) the problem is even more complex. Traditionally it is tacitly assumed that the absence of an absence of *x* is just *x* itself, but this doctrine is evidently open to question. E.g. how can something be both an absence and a presence, given that absence (*abhāva*) is differentiated categorically from the six positive categories (*bhāva*) of classical Vaiśeṣika? On the other hand, if an absence of *x* is always a different additional category from *x*, then infinite regress ensues, since absence of absence of *x* is another category, absence of absence of absence of *x* another, and so on *ad infinitum*. Raghunātha is the most notable, though not the first, to tackle this problem. He is preceded at least by Śeṣa Śārṅgadhara, who denies that the absolute absence of an absolute absence is a presence. However, Gaṅgeśa's section on absences does not raise the question.[26]

In at least three different places Raghunātha Śiromaṇi tells us that an absolute absence of an absolute absence of *x* is the same thing as *x*, agreeing with Śeṣa Śārṅgadhara.[27] Otherwise, he argues sensibly enough, there will be infinite regress. However, just prior to the relevent passage of the *Padārthatattvanirūpaṇa* he seems to argue the reverse, that an absence of an absence is *not* a presence but a new category. The way to avoid the infinite regress, he explains, is to equate a triple absence (absence of absence of absence of *x*) with a single one (absence of *x*). Raghunātha does not really explain why he treats mutual absence differently from the other kinds in this way.[28]

What about the absence of *x*'s absence prior to its destruction, or the absence of *x*'s absence when *x* comes into being? Raghunātha says these have to be added to the list of kinds of absences. As for prior and posterior absences, he disposes of these in favor of functions of the other remaining kinds of absences. He concludes this tantalizing section by denying that prior absence is not even an absence. What it is according to those with this opinion he doesn't tell us.[29]

Another hotly debated issue, discussed in a separate section of *Tattvacintāmaṇi*, is whether a generic absence is or is not the product of the collection of a number of specific absences, e.g., whether *absence of cow* is a product of *absence of Bossie* and all the other absences of specific cows.[29]

Gaṅgeśa's own view is that generic absence cannot be the product of specific absences. His problem centers around the fact that air is colorless, but that though this is well known to everyone, in Vaiśeṣika metaphysics it is nevertheless argued whether air has color or not. If this doubt can occur it must be about something. Gaṅgeśa's

position is that, while we can know for sure that air lacks each specific kind of color on the color-wheel, that still leaves it possible to doubt that it lacks *any* color at all—otherwise the doubt that arises about air's lacking color can't be explained.

Frauwallner's study proceeds to examine the pre-Raghunātha commentators. Yajñapati expands Gaṅgeśa's argument, considering various ramifications. Jayadeva, however, proposes a completely new definition of "absence of color" as "the absence of any locus of colorness". The application to the present case is that even though one knows that A is not blue, not red, not yellow, etc., since we do not know how many colors there are we don't know that A is colorless. Using this definition he argues further that generic absence is not a single absence, but many absences. He derives this conclusion from the consideration that there are several different *kinds* of absences the counterpositives of which are the same entity (e.g., mutual absence of x in y; absolute absence of x in y, etc.). Since different absences may have the same counterpositive the difference between them has to be derived from somewhere else. Thus a prior absence of x is the absence of x at a time before x occurs, the absolute absence of x its absence from a given locus at any time, etc. A generic absence, then, is not a single absence but a whole family of these kinds, as illustrated.

Rucidatta's explanation, which Frauwallner argues is frought with difficulty, seems to come eventually to the same conclusion as Jayadeva. But Vāsudeva Sārvabhauma's discussion, the longest of them all, takes exception to all his predecessors.

Raghunātha, characteristically, criticizes everyone's view. For example, he rejects Jayadeva's differentiation of generic absence from single absences. He points out that differences between specific absences is due to their loci being different, not to their counterpositives being different. Since the locus of a specific absence of pot *a* is a different locus from the specific absence of pot *b*, the generic absence of all pots is not just located in all the loci of a collection of component specific absences. Just as a universal inheres in many things and is not identical with any of them, so generic absence characterizes the loci of each of the several specific absences and yet is not identical with any of them.[31]

E. *New Categories*. Raghunātha, besides eliminating motions and individuators from the canonical list of seven categories (along with his sizable revision of the types of entiries compressed within each category) adds at least eight new categories to the list in his *Padārthatattvanirūpaṇa* alone, as well as others elsewhere (e.g., certain absences of absence, as we just saw). These specific eight are as follows:

(1) Moment (*kṣaṇa*). On the old view time was classified as a substance, and a moment then comprised a limited portion of this substance. The limitor was taken to be, e.g., the motion of a ray of sunlight measured by its contact with a certain mountain. And a motion constituted the third category of things postulated by the old school.

Raghunātha, we know now, rejected motion as a category. Furthermore, he argues here that the moments supposedly comprising the limited portion of a substance cannot be the limitors of motions. According to him there is no momentariness in motions; motions are *sui generis* and have no proper universal inhering in them. So they are not members even of the category of quality (*guṇa*). Indeed, we are forced to admit, says Raghunātha, that motion must constitute a hitherto unrecognized category of entities.

(2) Possessedness (*svatva*). Raghunātha's keen originality is nowhere more in evidence than in his argument for the second new category. When we say that something belongs to someone, a statement that is sometimes true, how does this get "mapped" onto the Nyāya-Vaiśesika scheme of things? In terms of what can it be analyzed? Raghunātha cleverly argues that any attempt to analyze ownership or possessedness in terms of other notions involves appealing to the notion of ownership (or possessedness) in the analysans. That being the case, there is no alternative but to admit, say, possessedness as a fundamental category itself.

(3) Causal efficacy (*śakti*). Students of Pūrvamīmāṃsā will be aware that causal efficacy or power is postulated as a separate category by the Prābhākaras, and the postulation is even found in an occasional old Vaiśeṣika.[32] Gaṅgeśa, who has Prābhākara opponents very much on his mind, takes on the task of refuting the theory of causal efficacy. Gaṅgeśa's contention is interesting: it is that if the arguments for causal efficacy are allowed to stand they will generate infinite regress. The argument goes as follows: some things burn and some don't; the kind that does must possess something else that explains why *it* burns but the other kind doesn't; this something else is an entity called causal efficacy. But this postulation of an additional entity must be repeated when we ask what is the cause of this causal efficacy, since every distinct occurrent entity must have a distinct inherence cause. And so on and so forth *ad infinitum*. Causality should instead be treated as a universal property. (Arguments with Mīmāṃsakas about causality reverberate as a recurrent theme throughout our literature.)

Raghunātha Śiromaṇi reverses the Nyāya view, and subscribes to the previously rejected view that causal efficacy needs to be admitted as an additional entity. His reason is simplicity. If we do not admit

causal efficacy, he argues, we will have to postulate legions of things that are clearly individuals of the same generic kind. For example, we can make a fire in several ways. Does that mean there are several different kinds of fire? Raghunātha, the defender of simplicity at all costs (despite the complexity of some of his arguments!) finds the argument telling, and postulates a new category of things. The application here is that a single causal-efficacy-to-produce-fire attaches to the several distinct sets of kinds of connecting relations between cause and effect.

(4) Causality (*kāraṇatva*). Consider several causes—the substance that catches fire, the disjunction that produces an absence of contact, and so on. Do they share a common property of causality? No, says Raghunātha, since the supposed universal causality will inhere in different categorial kinds, the first in a substance, the second in disjunctions (a kind of quality), etc. On pain of crossconnection, therefore, we shall have to explain otherwise what the fiery substance and the disjunction have in common, and we can do that only by postulating another new category of things, namely, a distinct category of causality.

(5) Effectness (*kāryatva*). Analogously we shall have to postulate a new, distinct category common to all effects. Since there is no valid reason to reduce either causality to effect-producing or effectness to being-causally-produced, both need to be admitted.

(6) Number (*saṃkhyā*). Classically number is treated in Vaiśeṣika as one of the qualities. Raghunātha notes, however, that we rightly say "this cloth is three-colored". We thus predicate triplicity of the colors in the cloth, and color is itself a quality. Now a quality can only inhere in a substance in Vaiśeṣika. It follows that triplicity, i.e., the number three, cannot itself be a quality. It can't be any of the other traditional categories either, or for that matter any of Raghunātha's new additions up to now. Therefore it must be added to the list of new categories.

(7) Being qualified (*vaiśiṣṭya*). One of the earliest canonical Nyāya-Vaiśeṣika list divides sense-object connection into six kinds: (1) contact, (2) inherence in what is conjoined, (3) inherence in what inheres in what is conjoined, (4) inherence, (5) inherence in what inheres, and (6) the qualifier-qualified relation. These are themselves entities (as relations are in this system), and it is easy to see that (1) is a quality and (2)–(5) belong to the category of inherence. What about (6)? Classically this was treated as a self-linking connector relating an absence or (an) inherence to its loci.[33]

However, Raghunātha questions this classification. Inherence is a category, he notes; presumably the reason something is classed as a category is that its postulation is found to be necessary to explain

what certain kinds of judgments—e.g., that a certain substance has a certain quality—are about. Likewise, since the qualifier-qualificand relation is postulated to explain what a certain kind of judgment is about, it too should be a category. That relation is postulated to explain what "the pot is not on the table" is about. So it must be a separate category just as inherence is.

(8) Contentness (*viṣayatā*). In the same manner contentness, which connects the contents of judgments with the judgments themselves, should be counted as still another separate category.

4

EPISTEMOLOGY

Concern with theory of knowledge is high during the period we are surveying in this volume. We have already seen, in Chapter Two of this Introduction, how Navyanaiyāyikas develop a highly technical method of limitors and self-linking connectors to accomplish quantification and other procedures for precise reference. In a broad sense of "epistemology" all these concerns fall within its purview, but we forbear to repeat them here. In the present section we survey developments in Navyanyāya ways of treating only a section of epistemology, specifically that of the instruments of knowledge.

Before considering the several instruments, however, we should first review the account of truth and error developed in the system. The main part of what is new here involves critique of other systems, notably of the Pūrvamīmāṃsakas, who bulk large in Gaṅgeśa's view of his opposition, and also of the supercritical stance of Śrīharṣa in his *Khaṇḍanakhaṇḍakhādya*, which wins extended attention from several Naiyāyikas in our period.

1. *Truth and Error*. An awareness (*jñāna*) is, in the sense we understand it here, an act.[34] It is something which happens at a time, an occurrent. If it involves belief, it does so only in the sense of a believing as a fleeting act of awareness. It is not a belief in the dispositional sense. And not all *jñānas* are beliefs even in the occurrent sense—believing is only one sort of *jñāna*. Any act of awareness which has intentionality constitutes a *jñāna*. Entertaining a doubt, vaguely sensing the presence of something or other, drawing a *reductio ad absurdum* inference, and understanding someone's meaning are all *jñānas*. None of them are believings. And since they are not beliefs (in any sense) none of them are true beliefs, and none of them are justified beliefs. Rather a *jñāna* is, as indicated, *an* awareness. It is not knowledge, or even *a* knowledge, *per se*, though it remains open to further scrutiny whether all, some or no acts of

awareness constitute instances of knowledge in some sense other than justified true belief.

Now here is Gaṅgeśa's analysis of truth (*prāmāṇya*) as formulated in the *Prāmāṇyavāda* section of the first Book of *Tattvacintāmaṇi*. He says, truth is:

> "Either (a) being an awareness whose chief qualifier, *x*, is in what possesses *x*, or (b) being an awareness of a relatedness of *x* to what possesses *x*."[35]

This says that a piece of knowledge (*pramā*) is an awareness (a) whose predicate term (as we might put it) belongs to its subject term, or (b) which attributes some property *x* to a content which actually has *x*. Gaṅgeśa argues, in favor of his analysis, that only when (a) or (b) is satisfied does one undertake action predicated on the awareness in question. In addition, he argues, this is the most economical account of what truth is.

It is important to emphasize that Gaṅgeśa puts forth this analysis as a conception which is common to all theories about truth. Gaṅgeśa's idea is that, however each different believer in intrinsic validity thinks the truth of an awareness A is made known to us, in any case *what* is made known is a combination of two things, (1) that the qualificandum (i.e., the subject term) of A possesses a certain property, and (2) that that property is the chief qualifier (predicate term) of A. The claim is that the joint satisfaction of (1) and (2) is a requirement common to all those who hold to the intrinsic validity position, and it is a necessary condition (though possibly not a sufficient one) even according to an extrinsic validity theorist that (1) and (2) be satisfied whenever truth is present.

Among those philosophers who have become caught up in the intrinsic/extrinsic validity debate we may count some Buddhists, several kinds of Mīmāṃsakas, the Naiyāyikas and not a few Advaita Vedāntins. Let me start with Buddhism. In Dharmottara's *Nyāyabinduṭīkā* we find the following passage explicating the notion of "right awareness" (*samyagjñāna*), which I take to be his term for knowledge.

> "Right awareness is awareness that is not contrary to what it is right to attribute (to something). In ordinary usage it is said that what is right to attribute (to something) is that which causes us to attain a purpose which has been previously identified.... 'Attaining the purpose' here means just causing our activity to have to do with the purpose identified, and nothing else. Now, awareness does not produce the purpose, but it does cause us to attain it. In causing a person to initiate activity toward a

purpose, it causes him to attain it. This initiating of activity is merely the identification of a content of activity..."[36]

As I read this passage, Dharmottara's idea is that the function of a right awareness is to direct the attention of the person having it toward the content of that awareness as being relevant to a previously identified purpose or purposive object. That sort of awareness which does this regularly deserves to be called an instrument of knowledge. What sort of awareness does this regularly? According to Buddhism of Dharmottara's school it is perceptual awareness, defined as direct awareness, i.e., awareness which does not involve conceptual construction (*kalpanāpoḍha*).[37] What we might call sensation constitutes such perception, since it is a moment of sensory awareness prior to association with language or memory. Sensation is right awareness *par excellence* for the Buddhist, since its entire function consists in calling its content to our attention as something which is a possible object of successful purposive activity.

For Dharmottara, then, the relation between right awareness and its content requires that the awareness apprehends the content as an objective suitable for successful purposive activity. And if (as Gaṅgeśa himself will not admit) sensation can be supposed to ascribe a property to something, then a right awareness ascribes to its content the property of being an object of successful activity, which property that content (which Buddhism calls the *svalakṣaṇa*) indeed possesses.

Next let us consider those schools which are treated by Gaṅgeśa himself. First we may consider the Prābhākara Mīmāṃsaka. According to the Prābhākara there is no cognitive error at all;

"When we say an awareness is false we really mean that it leads to unsuccessful behavior."[38]

A rather late Prābhākara, Rāmānujācārya, distinguishes between three relations called *yāthārthya, prāmāṇya* and *samyaktva*:

"*Yāthārthya* belongs to all awareness (including memory and what ordinarily passes for erroneous apprehension), *prāmāṇya* to all awareness excepting memory (but including even the so-called erroneous apprehension) and *samyaktva* only to such knowledge other than memory which leads to successful practice."[39]

As in Buddhism, the function of knowledge is to present to us a content which is an object of successful activity—the Prābhākara adds that it must do so for the first time, and that it not be a memory,

but that does not materially affect the point being made, which is that the analysis is the same as before.

Turning next to the Bhāṭṭa Mīmāṃsakas, followers of Kumārila,[40] we find a divergence of explanations but essential agreement that either truth involves the relation that we have seen Buddhists and Prābhākaras to emphasize, viz., the picking out of a content as an object of successful activity, or else (for some Bhāṭṭas) it involves a relation they term *viṣayatathātva*, which might be rendered as "an awareness' being as its content is". I submit that this relation can well be taken as truth, and it nicely satisfies Gaṅgeśa's analysis of truth.

A third type of Mīmāṃsā is that known as the Miśra school, a system whose literature is largely lost to us but which appears in an important role in Gaṅgeśa's discussions. The Miśra account of truth is rather more complex than those of the other Mīmāṃsakas. The Miśra analysis is that truth is *tadvadviśeṣyakatve sati tatprakāra-katva*,[41] that is to say, a *pramā* must satisfy two tests, (1) that the awareness in question must present a qualificand, C, which has a chief qualifier, Q, and (2) that it must present C as qualified by Q. When we compare this with Gaṅgeśa's analysis we find that tests (1) and (2) are precisely Gaṅgeśa's (1) and (2).

Next, consider the Vivaraṇa Advaita Vedānta school's analysis of truth as the property of being an awareness which is capable of picking out that content which accords with its purposes.[42] It should be clear that this conception again satisfies Gaṇgeśa's general requirement.

Finally we must consider the Nyāya analysis itself, which is just what Gaṅgeśa himself proposes, viz., the simultaneous satisfaction of Gaṅgeśa's (1) and (2).[43] *A fortiori* this satisfies (since it is identical with) Gaṅgeśa's analysis of truth.

Now what is the extrinsic/intrinsic validity debate about? The intrinsic validity theorist holds that whatever causes us to be aware of A causes us to be aware that A can satisfy its purpose, i.e., can lead to successful activity of the relevant sort. The extrinsic validity theorist denies this, holding that to become aware that A can satisfy its purpose we need a further awareness, presumably inferential, which is over and beyond the awareness which causes us to be aware of A itself. The point comes out most dramatically when we contrast the Miśra theory with the Naiyāyika's. On both theories we first have an awareness A, which is not self-aware but for the awareness of which we require an "aftercognition" B. The Miśra theory holds that B not only makes us aware of A but also of A's truth, i.e., A's capacity to evoke successful activity. The Nyāya theory denies that B makes us aware of A's truth. Nyāya holds that only an inference,